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WEEKLY WEATHER AND CROP BULLETIN

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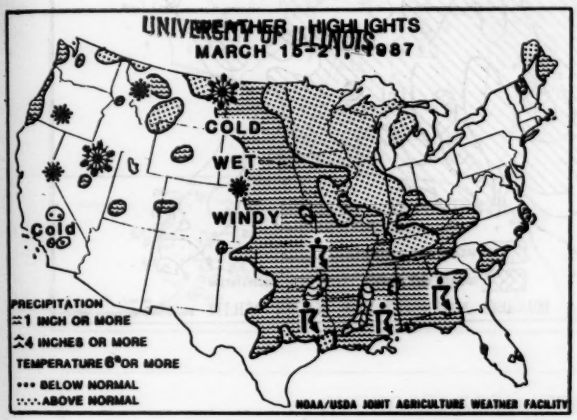
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

National Weather Summary

March 15 to 21, 1987



HIGHLIGHTS: A parade of Pacific storms moved into the West, through the mountains, and into the Great Plains. Then a blocking ridge of high pressure, holding stationary over the east coast, shunted the storms southward. Rain covered the west coast, and snow was heavy in much of the mountains and Plateau region. A mixture of cold rain and wet snow lingered over the central and northern High Plains, while snow covered the northern Plains. Thunderstorms triggered heavy rain from eastern Texas to western Georgia and northward into eastern Kansas. Moderate to heavy rain fell in eastern South Dakota and Iowa and in parts of Kentucky and the central Appalachians.

SUNDAY...A Pacific storm spread precipitation throughout the West. Snow covered most mountain locations, and strong wind blew through southern California and over the central and southern Plateau. Light snow or cold rain began in the central High Plains. In the East, a weakening disturbance triggered moderate rain in Kentucky, and lighter rainfall through the Ohio Valley and from Tennessee through Virginia and southern Maryland.

MONDAY...The intense western storm spread snow or rain throughout the Rocky Mountains. Wet snow and cold rain plagued livestock in the central and northern Great Plains. Thunderstorms developed in the eastern part of the central and southern Plains and resulted in moderate to heavy showers. Light rain moved out of North Carolina and Virginia.

TUESDAY...The storm moved through the central Plains, triggering heavy thunderstorms from eastern Texas to Alabama and northward through Kansas. Heavy rain reached on to eastern North Dakota. Cold, wet snow and gusty wind covered the High Plains from Texas to the Dakotas and Montana. Another rain spread over the Northwest.

WEDNESDAY...A large high pressure system in the East shunted the storm across the South. Precipitation fell from the Southeast to the northern Plains. Thunderstorms covered the Southeast, rain in the middle Mississippi and Ohio Valleys, and snow in the northern Plains. The next Pacific storm spread rain over the Northwest, the Plateau, and northern Rockies, with snow at most mountain locations.

THURSDAY...As a storm moved off the coast in the Southeast, the parade of storms into the West continued. Rain fell through all of the West Coast States and, with the advent of cooler air, lots of snow covered the Plateau, the northern Rockies, and northern Plains. The departing storm left light rain in the Carolinas and western Virginia.

FRIDAY...A storm moved out of the Rockies onto the central Plains and spread rain through the lower Missouri River basin and wet snow in North Dakota. Unseasonably cold weather spread into the West, and snow covered the northern Rockies and much of the central and northern Plateau. An old storm sank southward from New Foundland and triggered snow in much of the Northeast with rain along the coast.

SATURDAY...The next Pacific system spread rain through California and the central and southern Plateau. Thunderstorms developed in central California. Snow was heavy in the Sierras and in much of the Plateau. Snow and cold rain spread over the northern High Plains. Snow in the mountains and rain along the coast continued in the Northeast.

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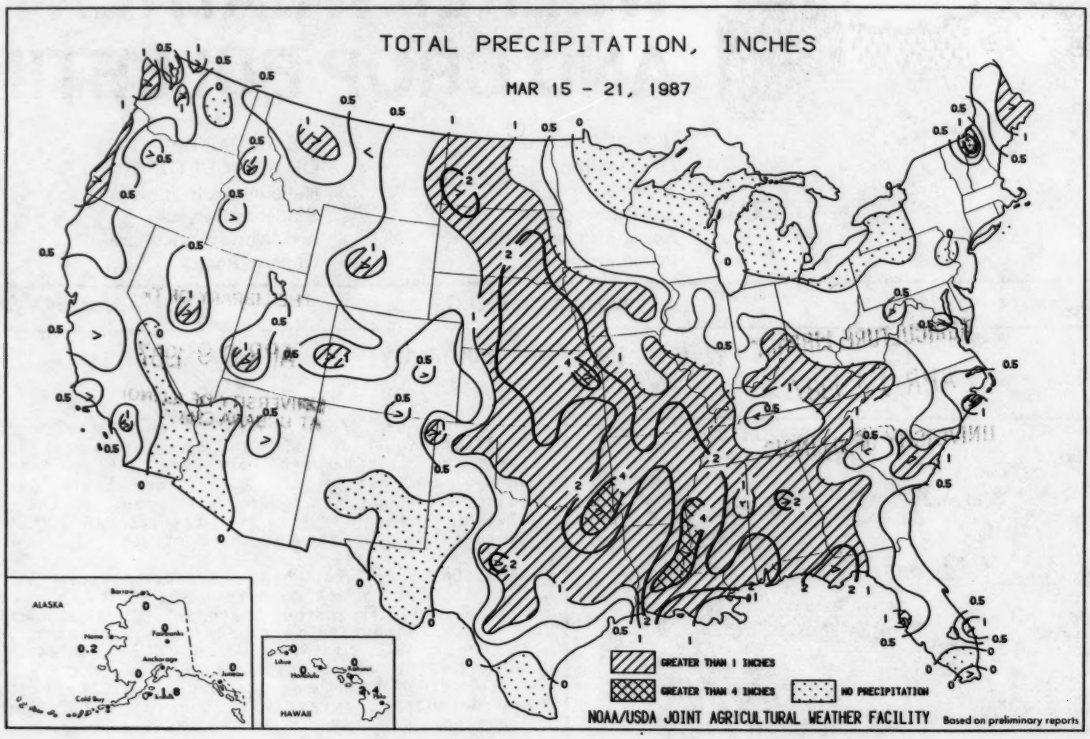
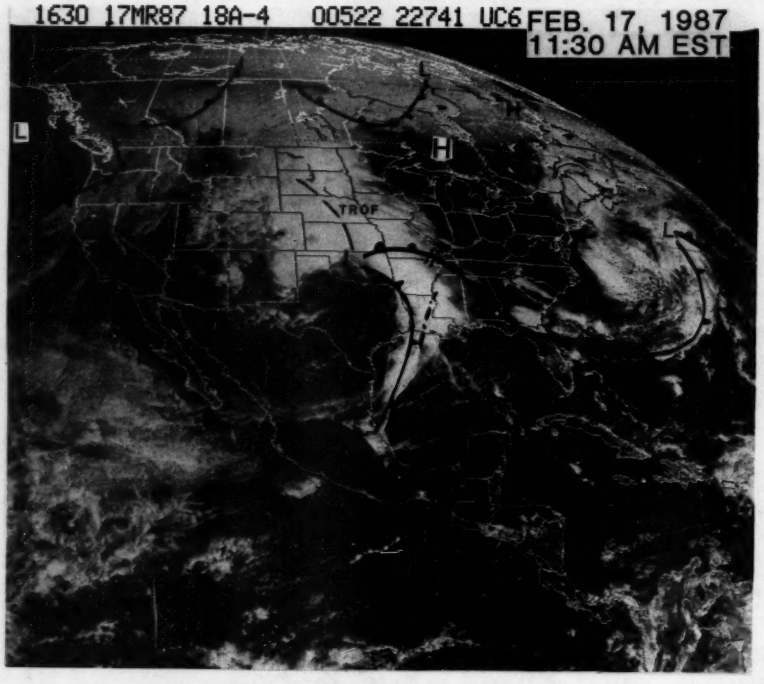
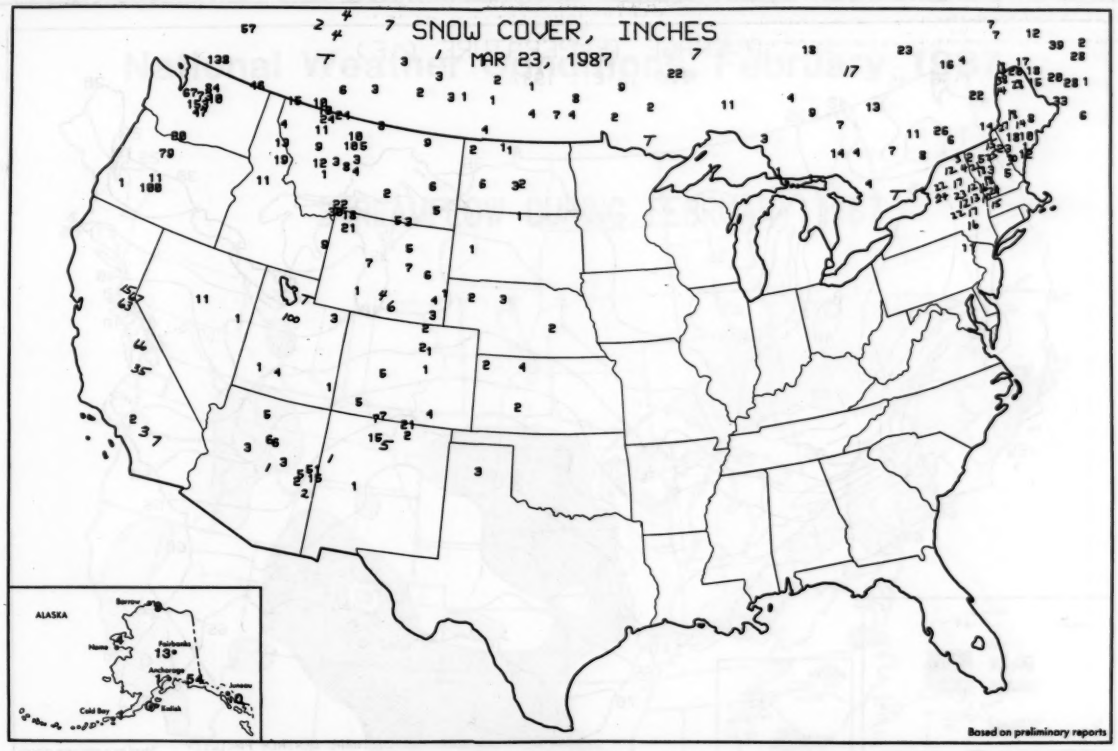
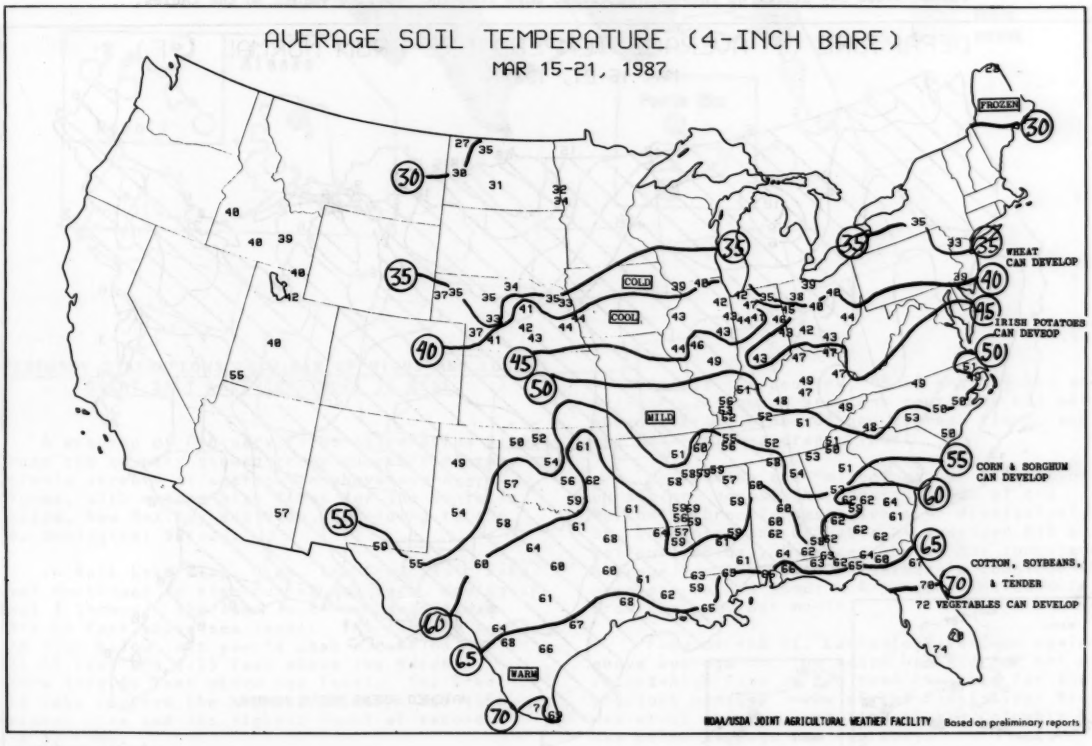


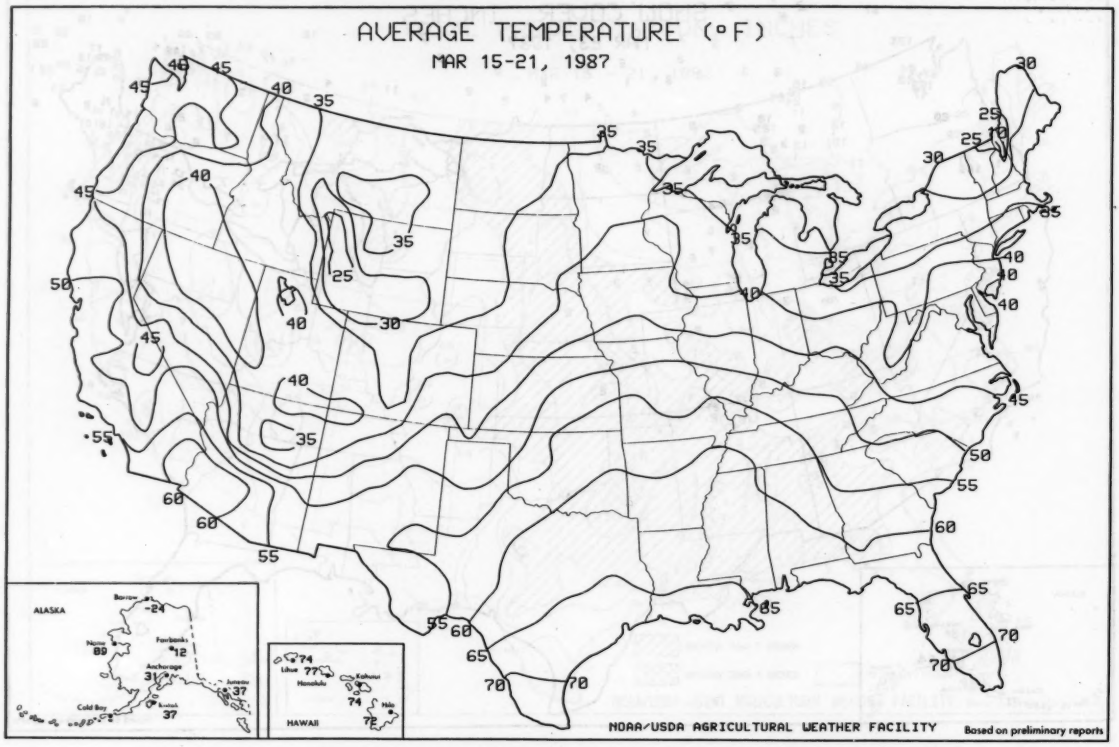


HEAVY SNOW FALLS IN THE HIGH PLAINS, AND THUNDERSTORMS MOVE THROUGH THE LOWER MISSISSIPPI VALLEY AS AN EXTENSIVE STORM SYSTEM BRINGS PRECIPITATION TO MUCH OF THE CENTRAL UNITED STATES.

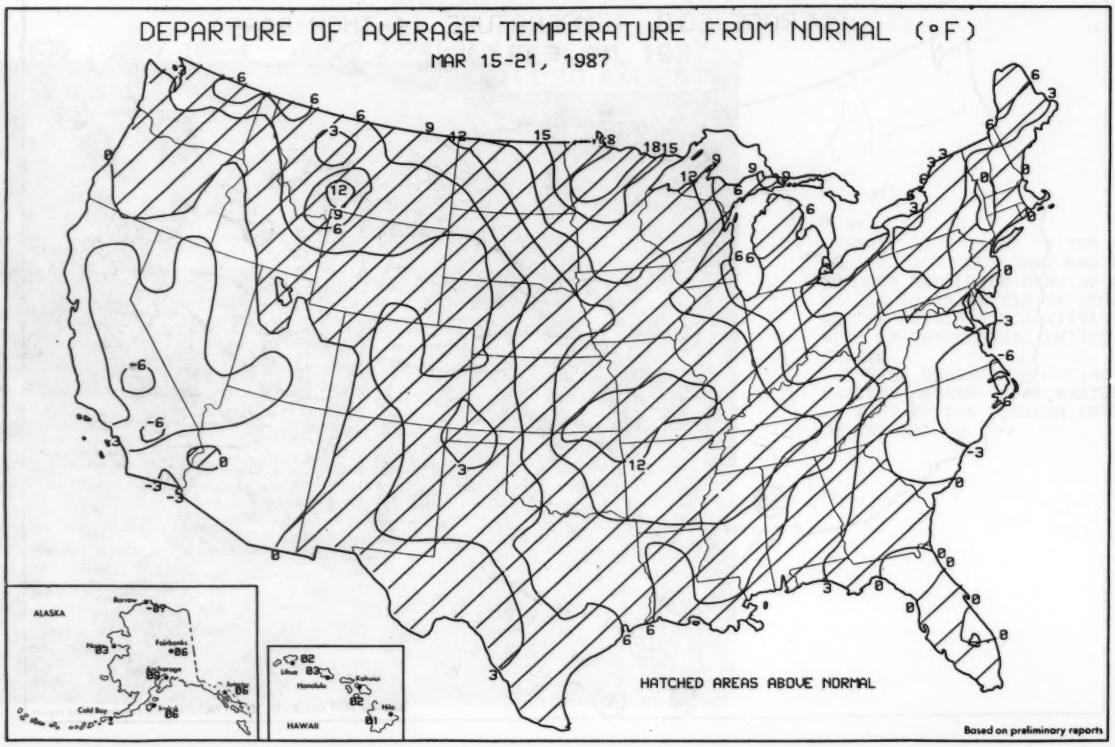
A HIGH PRESSURE BLOCKING PATTERN CAUSES CLEAR WEATHER IN MOST OF THE EASTERN PORTION OF THE NATION.


SNOW COVER, INCHES
MAR 23, 1987
ALASKA
Barrow
Fairbanks
Nome
13*
Anchorage
54
Juneau
50
Cold Bay
Kodiak
Based on preliminary reports

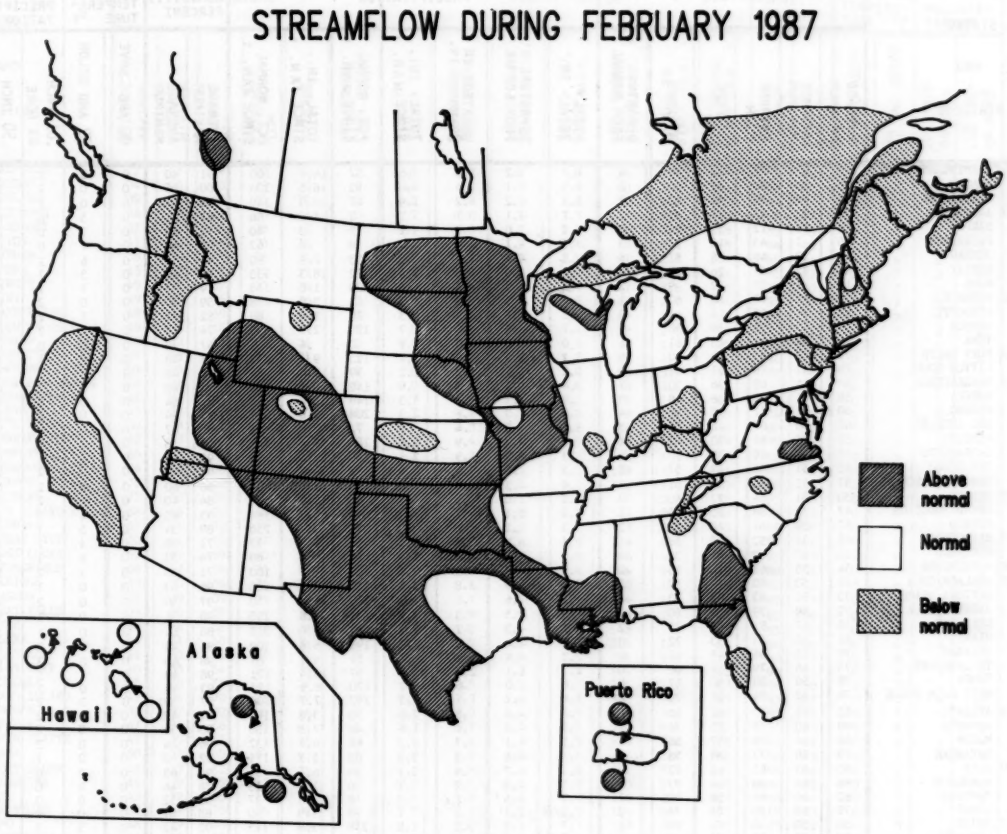

AVERAGE SOIL TEMPERATURE (4-INCH BARE)
MAR 15-21, 1987
FROZEN
COLD
COOL
MILD
WARM
WHEAT CAN DEVELOP
IRISH POTATOES CAN DEVELOP
CORN & SORGHUM CAN DEVELOP
COTTON, SOYBEANS, & TENDER
72 VEGETABLES CAN DEVELOP
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports



Point values may differ on these computerized maps from the reported values in the tables.



National Weather Conditions, February 1987



FEBRUARY STREAMFLOWS SHOW MIX OF HIGHS AND LOWS; GREAT SALT LAKE CONTINUES TO RISE

A wrap-up of February flows at selected sites across the country showed three-quarters of the Nation's streams at average to above-average volumes, with record-high flows for the month in Florida, New Mexico, and Utah, according to the U.S. Geological Survey.

In Salt Lake City, Utah, the Great Salt Lake level continued to rise during February, moving up about 3 inches. The lake level on March 1 was 4,211.65 feet above sea level. The lake is now 0.20 feet below last year's peak elevation of 4211.85 feet and 1.75 feet above the March 1, 1986's 4209.90 feet above sea level. The Great Salt Lake reached the highest point in its 1986 seasonal rise and its highest level of record, June 3, 1986.

Across the country, 48 of the 173 key index streamflow gauging stations routinely had well-above-average flows, 82 had average flows, and 43 had well-below-average flows.

Reflecting the "mixed bag" of streamflow conditions across the country, flow of the Nation's three largest rivers -- Mississippi, St. Lawrence, and Columbia -- averaged 636 billion gallons per day, 5 percent below the long-term average for the month. February's combined flow, however, marked about a 4-percent increase in flow from the previous month.

Flow of the St. Lawrence River was again above average for the month but did not set a record-high flow as had been the case for the 5 previous months. Flow of the Mississippi River was about average, and flow of the Columbia River was below average for February.

National Weather Data for Selected Cities

Weather Data for the Week Ending MARCH 21, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 1	PCT. NORMAL SINCE MAR. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	70	47	77	42	58	4	1.7	.2	1.5	2.6	57	14.4	100	91	40	0	0	2	1
MOBILE	75	53	80	49	64	3	2.5	1.1	2.4	4.0	92	18.5	134	100	45	0	0	2	1
MONTGOMERY	73	48	79	41	60	3	1.2	-.2	1.2	1.9	47	18.9	149	95	44	0	0	1	1
AK ANCHORAGE	39	23	43	15	31	7	T	-.1	T	T	2	1.8	86	87	51	0	5	0	0
BARROW	-19	-28	-12	-35	-24	-8	T	0	T	T	13	.2	40	74	65	0	7	0	0
FAIRBANKS	26	-1	43	-13	12	3	T	-.1	T	T	0	.8	62	75	40	0	7	0	0
JUNEAU	45	30	48	26	37	6	.2	-.5	.2	.5	23	7.8	80	90	55	0	6	2	0
KODIAK	43	32	48	26	37	6	1.8	.9	.6	3.4	122	18.3	135	94	68	0	3	7	1
NOME	17	1	28	-12	9	2	.2	0	.2	.4	100	1.8	113	79	47	0	7	1	0
AZ PHOENIX	71	49	77	46	60	-1	.3	.1	.2	.3	45	3.0	158	59	20	0	0	2	0
PRESCOTT	53	29	58	22	41	-2	.3	-.1	.2	.3	26	3.8	88	82	31	0	7	2	0
TUCSON	69	43	74	39	56	-2	.1	-.1	.1	.7	135	2.9	153	74	22	0	0	2	0
YUMA	72	49	81	43	61	-4	0	0	0	T	0	.4	57	57	23	0	0	0	0
AR FORT SMITH	72	48	83	38	60	9	3.1	2.2	3.0	3.1	123	9.1	132	91	48	0	0	4	1
LITTLE ROCK	70	52	79	41	61	8	1.2	.1	1.2	1.2	39	9.4	87	76	48	0	0	1	1
CA BAKERSFIELD	60	41	68	36	50	-7	.4	.2	.4	.9	148	3.4	131	93	48	0	0	2	0
EUREKA	55	41	58	38	48	0	.9	-.3	.3	5.3	149	15.2	97	87	64	0	0	6	0
FRESNO	60	41	67	35	50	-4	.6	.3	.6	2.3	208	5.6	112	93	44	0	0	2	1
LOS ANGELES	62	48	67	46	55	-3	.6	.2	.4	.9	72	2.8	41	89	47	0	0	2	0
REDDING	58	35	67	30	47	-8	.9	-.2	.9	6.6	186	18.6	102	94	38	0	2	1	1
SACRAMENTO	61	39	69	32	50	-3	.3	-.2	.3	2.5	170	7.9	95	93	40	0	1	1	0
SAN DIEGO	63	51	66	49	57	-2	.5	.1	.3	.9	75	4.1	84	85	50	0	0	2	0
SAN FRANCISCO	57	45	60	39	51	-2	.4	-.2	.4	1.8	96	8.1	84	90	60	0	0	2	0
CO DENVER	50	31	64	27	40	2	.3	0	.3	.7	96	2.6	137	84	40	0	6	2	0
GRAND JUNCTION	47	31	58	25	39	-3	1.3	1.1	.7	1.8	379	3.3	194	93	45	0	4	5	1
PUEBLO	57	29	67	18	43	2	.3	.1	.3	.3	70	2.3	256	89	34	0	5	1	0
CT BRIDGEPORT	45	31	52	26	38	-1	.1	-.8	.1	1.6	59	6.8	77	71	36	0	4	1	0
HARTFORD	45	27	50	21	36	-1	.1	-.8	.1	1.7	61	8.3	88	74	33	0	6	1	0
DC WASHINGTON	54	35	61	32	45	-2	.3	-.5	.2	.6	27	7.7	100	71	30	0	2	2	0
FL APALACHICOLA	72	53	80	41	62	1	2.8	1.9	2.8	3.5	125	13.6	136	96	63	0	0	1	1
DAYTONA BEACH	75	52	83	43	63	-1	.1	-.6	.1	2.5	120	11.4	150	97	50	0	0	2	0
JACKSONVILLE	72	49	79	38	60	-2	.3	-.5	.3	3.2	136	13.8	155	98	51	0	0	1	0
KEY WEST	78	67	81	58	73	-2	T	-.3	T	8.6	985	10.0	217	86	61	0	0	1	0
MIAMI	81	63	85	53	72	0	T	-.4	T	2.3	191	5.8	109	86	42	0	0	0	0
ORLANDO	79	55	84	48	67	0	.3	-.4	.2	2.1	91	5.1	67	98	40	0	0	2	0
TALLAHASSEE	75	46	79	31	60	0	2.3	1.1	2.3	3.8	97	16.4	121	98	43	0	1	1	1
TAMPA	78	56	80	50	67	0	.8	0	.6	4.2	170	8.9	117	93	45	0	0	2	1
WEST PALM BEACH	78	62	84	57	70	0	1.8	1.2	1.7	5.3	292	7.7	108	87	50	0	0	2	1
GA ATLANTA	65	45	73	42	55	2	.8	-.6	.8	2.0	50	13.8	104	87	42	0	0	2	1
AUGUSTA	68	40	77	33	54	-1	.7	-.5	.4	1.6	48	17.8	156	95	36	0	0	2	0
MACON	68	44	78	37	56	-1	1.1	-.1	.7	2.3	64	16.2	132	96	44	0	0	2	1
SAVANNAH	69	48	77	38	58	-1	.3	-.6	.2	2.2	82	15.2	171	92	42	0	0	2	0
HI HILO	80	63	82	61	72	0	2.4	-.7	.9	3.1	34	16.4	51	94	63	0	0	6	3
HONOLULU	86	69	88	64	77	4	T	-.8	T	T	0	1.2	13	78	44	0	0	0	0
KAHULUI	82	66	84	59	74	1	T	-.6	T	.2	8	3.3	37	82	52	0	0	0	0
LIHUE	79	69	80	65	74	2	T	-1.1	T	T	0	3.9	30	88	62	0	0	0	0
ID BOISE	50	30	54	22	40	-2	.7	.5	.5	1.8	270	3.8	115	92	42	0	5	3	0
LEWISTON	52	37	55	31	44	1	T	-.2	T	.4	59	1.4	47	89	49	0	1	1	0
POCATELLO	47	27	51	18	37	1	.2	-.1	.1	.8	125	2.5	100	89	40	0	5	3	0
IL CHICAGO	48	32	60	28	40	2	.4	-.3	.4	1.2	73	3.9	89	79	34	0	6	2	0
MOLINE	52	33	64	29	42	6	.4	-.2	.2	1.1	64	2.9	63	82	42	0	4	2	0
PEORIA	54	36	68	32	45	7	.3	-.3	.2	.7	42	3.1	65	77	42	0	1	2	0
QUINCY	58	39	67	34	49	9	.8	.1	.6	.9	46	3.1	65	90	49	0	0	3	1
ROCKFORD	49	30	60	26	39	5	.5	-.2	.4	1.1	71	2.9	71	82	40	0	5	2	0
SPRINGFIELD	57	37	67	33	47	7	.6	-.1	.4	.7	38	2.9	56	86	43	0	0	2	0
IN EVANSVILLE	62	41	66	32	52	6	.9	-.2	.8	1.0	34	5.3	58	93	45	0	1	2	1
FORT WAYNE	51	28	59	22	39	2	.1	-.6	.1	.7	38	3.3	56	80	32	0	6	2	0
INDIANAPOLIS	54	34	59	30	44	4	.6	-.3	.3	.7	28	3.5	47	77	35	0	3	3	0
SOUTH BEND	51	29	59	24	40	3	.1	-.6	.1	.9	49	4.6	73	79	29	0	5	2	0
IA DES MOINES	52	38	66	33	45	10	.7	.2	.6	.8	59	2.6	76	87	50	0	0	4	1
SIOUX CITY	49	36	69	32	43	8	1.8	1.4	.6	1.9	172	2.5	93	97	66	0	1	6	2
WATERLOO	48	33	62	30	41	8	.8	.2	.4	1.1	79	2.4	77	92	52	0	4	2	0
KS CONCORDIA	56	39	72	32	47	7	2.9	2.4	1.5	2.9	241	4.4	169	92	66	0	1	3	2
DODGE CITY	57	35	73	28	46	4	1.2	.8	.9	1.2	128	3.2	168	94	60	0	1	2	1
GOODLAND	48	30	62	24	39	2	.7	.4	.4	.8	124	2.2	157	94	61	0	5	2	0
TOPEKA	58	43	73	37	51	8	4.6	4.1	2.4	4.6	340	8.4	255	95	66	0	0	4	2
WICHITA	62	43	75	37	53	8	2.4	1.9	1.8	2.4	179	7.1	254	91	58	0	0	3	2
KY BOWLING GREEN	63	42	65	34	53	6	.5	-.8	.4	.5	13	7.3	59	92	45	0	0	2	0
LEXINGTON	56	37	62	31	47	2	1.3	.2	.6	1.4	44	6.4	63	88	42	0	2	4	1
LOUISVILLE	58	40	65	34	49	3	1.2	.1	.6	1.3	42	6.6	68	87	38	0	0	4	2
LA ALEXANDRIA	74	53	79	48	64	4	3.5	2.4	3.5	4.7	135	19.2	142	88	49	0	0	1	1
BATON ROUGE	77	54	83	50	66	5	2.6	1.6	2.6	3.5	114	18.5	147	94	42	0	0	1	1
LAKE CHARLES	76	54	80	51	65	4	3.6	2.9	3.6	4.1	195	16.6	166	99	51	0	0	2	1
NEW ORLEANS	77	54	80	50	66	4	.5	-.6	.5	.7	23	16.9	126	98	45	0	0	1	1

Based on 1951-80 normals.

Weather Data for the Week Ending MARCH 21, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 1	PCT. NORMAL SINCE MAR. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	75	49	84	41	62	5	.6	-.3	.6	.6	26	10.7	107	93	41	0	0	2	1
ME CARIBOU	34	26	43	19	30	5	.6	.1	.3	1.0	60	3.6	59	96	68	0	6	6	0
PORTLAND	39	26	44	21	32	0	.5	-.4	.2	1.4	52	6.6	66	91	54	0	7	4	0
MD BALTIMORE	54	33	61	26	44	0	T	-.8	T	.3	11	8.4	100	67	27	0	3	1	0
SALISBURY	51	31	56	28	41	-4	.1	-.8	.1	1.4	50	10.7	113	85	33	0	5	2	0
MA BOSTON	41	30	46	26	36	-3	.2	-.7	.2	2.1	75	10.2	98	84	49	0	4	2	0
CHATHAM	38	30	41	26	34	-3	.5	-.5	.2	2.5	91	12.8	114	86	71	0	6	6	0
MI ALPENA	45	17	51	12	31	3	0	-.4	0	.5	45	2.3	55	91	27	0	7	0	0
DETROIT	49	27	57	23	38	2	0	-.6	0	.9	57	3.8	75	75	30	0	7	0	0
FLINT	49	22	55	19	35	2	0	-.5	0	.6	47	2.2	51	83	30	0	7	0	0
GRAND RAPIDS	48	25	59	20	36	2	0	-.6	0	.8	47	1.8	35	72	32	0	7	0	0
HOUGHTON LAKE	49	19	56	13	34	6	0	-.4	0	.4	30	2.0	50	75	21	0	7	0	0
LANSING	49	23	55	17	36	2	0	-.6	0	.5	34	1.9	42	86	30	0	7	0	0
MARQUETTE	44	18	50	13	31	3	0	-.5	0	1.1	79	4.0	87	84	29	0	7	0	0
MUSKEGON	49	26	58	21	38	4	0	-.6	0	.9	53	3.1	55	69	26	0	6	0	0
SAULT STE. MARIE	44	21	51	13	32	8	0	-.5	0	.6	48	3.2	62	71	26	0	7	0	0
MN ALEXANDRIA	44	32	58	22	38	13	T	-.3	T	.1	10	1.4	61	85	44	0	3	1	0
DULUTH	43	28	53	21	35	11	T	-.4	T	.3	23	1.2	38	74	33	0	6	0	0
INT'L FALLS	50	28	61	16	39	17	T	-.3	T	.2	26	.9	41	60	23	0	6	0	0
MINNEAPOLIS	49	33	60	26	41	11	T	-.4	T	.5	43	1.2	44	79	40	0	3	1	0
ROCHESTER	46	31	57	26	38	9	.2	-.2	.2	.7	61	1.5	58	84	45	0	5	2	0
MS GREENWOOD	74	52	80	43	63	8	3.5	2.1	3.5	4.3	102	13.9	101	92	39	0	0	1	1
JACKSON	75	50	82	43	62	6	2.4	1.1	2.4	4.1	112	19.0	147	96	38	0	0	1	1
MERIDIAN	77	50	84	44	63	7	1.3	-.3	1.1	2.1	48	22.2	159	95	33	0	0	2	1
MO CAPE GIRARDEAU	68	46	70	41	57	--	1.5	.4	1.0	1.6	47	5.7	61	94	57	0	0	2	2
COLUMBIA	62	44	72	39	53	10	.5	-.3	.5	.6	27	3.6	62	99	59	0	0	2	0
KANSAS CITY	58	41	73	37	50	7	1.8	1.2	.8	1.9	111	4.9	120	97	62	0	0	4	2
SAINT LOUIS	62	43	69	40	53	9	1.2	.5	1.0	1.3	63	4.7	78	87	49	0	0	3	1
SPRINGFIELD	66	47	74	36	57	12	2.4	1.6	1.4	2.4	106	9.7	162	88	55	0	0	2	2
MT BILLINGS	45	30	56	25	37	3	.3	.1	.2	.8	130	1.3	57	92	52	0	6	3	0
GLASGOW	37	29	39	24	33	5	.8	.7	.6	.9	494	1.1	138	97	77	0	7	4	1
GREAT FALLS	39	26	55	14	33	1	1.1	.9	.9	1.4	253	1.7	74	92	68	0	6	4	1
HAVRE	40	28	51	23	34	4	.1	0	.1	.1	43	.4	31	95	68	0	7	1	0
HELENA	44	24	56	14	34	2	.7	.5	.4	1.0	218	1.0	63	94	49	0	6	4	0
KALISPELL	44	30	54	25	37	5	.6	.4	.4	2.5	436	3.8	119	96	57	0	6	4	0
MILES CITY	40	30	54	27	35	3	.6	.5	.3	.7	209	.9	60	90	63	0	7	5	0
MISSOULA	45	29	56	23	37	2	.7	.5	.3	1.1	204	1.7	63	98	58	0	7	4	0
NE GRAND ISLAND	49	34	70	28	42	5	3.7	3.3	1.4	3.7	398	4.5	205	95	67	0	1	4	3
LINCOLN	52	37	72	29	44	7	2.5	2.0	1.1	2.5	206	3.1	107	93	71	0	1	4	2
NORFOLK	47	34	68	29	41	6	3.1	2.7	1.5	3.1	325	4.2	191	97	75	0	4	5	2
NORTH PLATTE	47	29	67	21	38	3	1.1	.9	.7	1.3	184	3.0	188	95	62	0	6	2	1
OMAHA	50	37	69	32	43	5	2.2	1.8	.9	2.2	189	2.9	104	96	73	0	1	5	2
SCOTTSBLUFF	43	27	52	24	35	-1	1.0	.8	.4	1.6	262	3.8	271	94	64	0	7	5	0
VALENTINE	41	29	65	17	35	2	.2	-.1	.1	.2	30	1.6	133	90	72	0	6	3	0
NV ELY	43	22	50	11	32	-1	.4	.2	.1	.9	156	2.3	115	95	47	0	7	5	0
LAS VEGAS	63	41	73	35	52	-4	T	-.1	T	.5	164	2.1	175	59	23	0	0	2	0
RENO	48	29	63	21	38	-2	.1	0	.1	.7	123	1.9	70	83	32	0	5	2	0
WINNEMUCCA	44	22	55	0	33	-6	.6	.4	.3	1.3	315	2.3	121	94	52	0	7	4	0
NH CONCORD	39	24	42	13	32	-1	.3	-.4	.3	1.2	59	4.2	58	88	50	0	6	2	0
NJ ATLANTIC CITY	51	26	56	24	38	-4	.1	-.9	.1	1.4	51	9.2	97	91	36	0	7	1	0
NM ALBUQUERQUE	59	33	68	26	46	-1	T	-.1	T	T	9	1.3	118	60	19	0	3	1	0
CLOVIS	64	37	72	32	50	3	T	-.1	T	T	6	2.0	167	75	25	0	1	1	0
ROSWELL	69	39	76	33	54	3	0	-.1	0	T	4	2.3	209	58	16	0	0	0	0
NY ALBANY	42	24	47	17	33	-1	.1	-.6	0	1.4	68	5.9	89	93	47	0	7	2	0
BINGHAMTON	41	26	46	22	34	1	T	-.7	T	.9	47	4.7	70	70	37	0	7	1	0
BUFFALO	45	24	50	19	35	1	T	-.7	T	1.1	58	4.9	67	82	30	0	7	0	0
NEW YORK	49	34	54	31	41	0	.1	-.9	.1	2.4	88	8.6	97	66	34	0	2	1	0
ROCHESTER	45	22	49	17	33	-1	T	-.6	T	.5	28	2.9	46	87	30	0	7	0	0
SYRACUSE	43	24	47	18	33	-1	T	-.7	T	1.1	52	4.8	66	83	38	0	6	1	0
NC ASHEVILLE	59	35	65	28	47	0	.8	-.3	.5	1.3	40	11.0	115	90	36	0	1	3	1
CHARLOTTE	60	37	70	35	49	-2	.8	-.3	.5	1.8	53	11.8	108	87	37	0	0	2	0
GREENSBORO	56	33	68	25	45	-4	.7	-.2	.6	2.0	75	10.5	111	87	39	0	3	3	1
HATTERAS	51	33	59	30	42	-9	.6	-.3	.6	2.5	92	17.4	150	97	48	0	4	2	1
NEW BERN	59	35	69	29	47	-6	.6	-.2	.6	2.5	100	13.6	130	98	46	0	2	2	1
RALEIGH	57	34	70	27	45	-5	.8	0	.7	1.8	70	13.9	146	88	43	0	3	3	1
WILMINGTON	61	36	68	32	49	-6	.5	-.5	.5	1.8	65	12.8	129	94	35	0	2	1	0
ND BISMARCK	36	32	40	30	34	7	1.1	.9	.4	1.1	285	2.9	223	97	85	0	4	5	0
FARGO	45	34	59	27	40	14	.1	-.1	.1	.1	27	1.3	93	83	53	0	3	3	0
GRAND FORKS	41	32	52	25	37	14	.2	.1	.1	.2	51	1.8	106	90	64	0	3	5	0
WILLISTON	36	31	37	28	33	7	1.2	1.0	.4	1.4	450	2.0	154	96	83	0	3	5	0
OH AKRON-CANTON	47	25	56	20	36	-1	T	-.8	T	1.0	47	3.3	48	78	33	0	7	0	0
CINCINNATI	56	34	62	28	45	2	1.4	.5	.7	1.7	65	4.2	50	73	32	0	2	4	1
CLEVELAND	43	25	49	17	34	-4	0	-.7	0	.8	42	3.3	50	89	34	0	7	0	0
COLUMBUS	55	30	62	21	42	1	T	-.7	T	.1	5	1.8	26	66	25	0	5	1	0

Based on 1951-80 normals.

Weather Data for the Week Ending MARCH 21, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 1	PCT. NORMAL SINCE MAR. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	55	29	64	24	42	2	T	-.7	T	.2	10	2.3	35	70	29	0	5	2	0
TOLEDO	46	27	58	20	36	0	.1	-.5	.1	1.9	116	4.3	78	80	36	0	6	1	0
YOUNGSTOWN	47	24	55	18	35	-1	T	-.8	T	1.0	48	3.4	49	86	33	0	7	0	0
OK OKLAHOMA CITY	66	47	77	40	56	7	1.4	1.0	1.2	1.6	117	8.1	225	90	50	0	0	2	1
TULSA	68	50	79	41	59	9	1.2	.5	1.2	1.2	62	8.3	163	85	47	0	0	2	1
OR ASTORIA	54	37	62	32	46	1	.7	.1	.5	7.9	398	23.4	252	98	61	0	1	5	0
BURNS	44	28	48	22	36	-1	.1	-.1	.1	1.4	192	3.6	97			0	6	2	0
MEDFORD	53	36	58	29	44	-1	.6	.2	.3	1.2	94	6.3	93	94	47	0	1	5	0
PENDLETON	50	37	54	33	44	-1	.3	.1	.2	1.4	188	3.5	97	81	54	0	0	2	0
PORTLAND	54	40	60	37	47	1	.4	-.4	.2	4.4	175	14.0	111	94	55	0	0	5	0
SALEM	55	36	61	30	46	1	.4	-.6	.2	3.4	113	14.6	100	96	53	0	2	2	0
PA ALLENTOWN	50	29	56	24	40	1	T	-.9	T	1.0	38	5.9	66	65	25	0	7	0	0
ERIE	42	24	47	20	33	-1	0	-.7	0	.6	34	3.8	60	82	37	0	7	0	0
HARRISBURG	53	31	59	24	42	1	.1	-.7	.1	.7	28	8.5	106	67	24	0	5	1	0
PHILADELPHIA	53	31	59	30	42	-1	T	-.9	T	.3	12	6.1	72	82	28	0	6	1	0
PITTSBURGH	50	28	58	22	39	0	T	-.8	T	.8	34	3.8	50	58	27	0	7	1	0
SCRANTON	46	25	51	19	36	-1	T	-.6	T	.3	18	3.6	60	74	30	0	7	1	0
RI PROVIDENCE	44	29	49	25	37	-1	.1	-.9	.1	1.8	64	6.9	65	80	39	0	6	1	0
SC CHARLESTON	67	44	76	37	56	-2	.7	-.3	.7	2.1	69	14.0	144	94	39	0	0	2	1
COLUMBIA	65	38	73	35	52	-4	.4	-.8	.3	1.5	42	15.2	128	97	36	0	0	2	0
FLORENCE	63	39	70	33	51	-4	.3	-.6	.3	1.5	54	12.1	123	85	32	0	0	1	0
GREENVILLE	63	37	74	34	50	-2	.5	-.9	.4	1.0	25	13.0	102	93	40	0	0	2	0
SD ABERDEEN	42	33	56	30	37	9	1.2	.9	.8	1.2	202	2.4	141	97	78	0	3	6	1
HURON	45	35	63	31	40	10	2.8	2.6	2.1	2.9	392	4.3	226	96	74	0	2	7	1
RAPID CITY	38	27	56	20	33	0	.7	.5	.3	.9	153	2.7	169	99	72	0	7	5	0
SIOUX FALLS	44	35	63	29	40	8	1.6	1.2	.8	1.6	165	2.0	83	95	69	0	2	7	1
TN CHATTANOOGA	66	44	73	34	55	5	1.9	.4	1.8	3.1	71	16.6	117	92	38	0	0	3	1
KNOXVILLE	65	41	68	31	53	3	1.0	-.3	.8	1.7	44	11.0	88	94	42	0	2	2	1
MEMPHIS	74	52	79	42	63	10	2.2	.9	1.9	2.2	61	9.7	78	86	42	0	0	2	1
NASHVILLE	68	45	73	37	57	7	.6	-.7	.6	.6	16	7.0	57	91	44	0	0	2	1
TX ABILENE	71	50	75	43	61	4	.8	.6	.8	1.0	155	5.1	196	84	43	0	0	2	1
AMARILLO	61	35	71	28	48	1	.3	.2	.3	.5	86	2.6	163	92	35	0	3	1	0
AUSTIN	76	55	80	44	66	5	.6	.2	.6	.9	85	4.7	92	91	44	0	0	1	1
BEAUMONT	77	56	80	52	66	6	.3	-.4	.3	.8	36	16.5	159	98	45	0	0	1	0
BROWNSVILLE	80	61	85	50	71	2	0	-.1	0	.5	161	5.2	168	97	56	0	0	0	0
CORPUS CHRISTI	79	59	85	49	69	3	.1	-.1	.1	.4	80	8.7	242	98	51	0	0	1	0
DEL RIO	74	53	78	43	63	-1	.2	.1	.2	.7	211	4.4	244	63	43	0	0	2	0
EL PASO	69	41	78	37	55	-1	.1	0	.1	.4	187	1.0	100	64	19	0	0	2	0
FORT WORTH	73	52	79	46	62	6	1.4	.9	.7	1.4	97	6.3	126	89	47	0	0	2	2
GALVESTON	73	60	77	57	66	5	.1	-.4	.1	.1	9	8.9	133	96	53	0	0	1	0
HOUSTON	77	55	81	48	66	4	.6	0	.5	.8	45	7.5	87	94	39	0	0	2	0
LUBBOCK	68	38	77	33	53	3	0	-.2	0	T	2	2.0	133	90	29	0	0	0	0
MIDLAND	70	43	77	37	56	1	T	-.1	T	.7	203	2.8	215	91	31	0	0	0	0
SAN ANGELO	72	46	80	34	59	1	.5	.3	.5	1.6	360	6.7	353	88	41	0	0	1	0
SAN ANTONIO	75	54	79	44	65	3	.6	.3	.3	1.0	124	6.9	164	94	49	0	0	2	0
VICTORIA	78	58	82	52	68	3	.1	-.2	.1	.3	39	7.0	140	95	45	0	0	1	0
WACO	75	52	81	44	64	5	1.1	.7	.6	1.4	116	5.4	110	93	47	0	0	2	2
WICHITA FALLS	70	47	79	41	58	4	1.0	.6	1.0	1.0	93	7.0	233	93	47	0	0	2	1
UT BLANDING	47	26	57	21	37	-3	.2	.1	.1	.4	73	2.9	100	96	48	0	7	4	0
CEDAR CITY	42	26	54	17	34	-6	1.2	1.0	.5	1.2	170	2.9	138	99	59	0	7	3	1
SALT LAKE CITY	47	33	53	26	40	-1	.5	.1	.2	1.3	122	4.2	114	84	44	0	3	4	0
VT BURLINGTON	37	24	41	13	30	0	.1	-.4	.1	.8	57	3.2	64	91	55	0	6	4	0
VA NORFOLK	51	34	59	30	42	-7	.2	-.7	.2	1.7	66	14.8	154	88	43	0	3	2	0
RICHMOND	54	30	61	26	42	-5	.2	-.6	.2	.6	25	8.7	99	87	33	0	5	1	0
ROANOKE	55	31	65	26	43	-3	.8	-.1	.4	1.3	52	10.4	122	90	41	0	5	3	0
WA COLVILLE	50	35	57	27	42	4	.7	.4	.4	3.3	382	5.5	122	94	71	0	2	5	0
QUILLAYUTE	52	35	58	32	44	1	1.7	-1.0	.6	12.8	152	35.2	101	99	57	0	1	5	2
SEATTLE-TACOMA	55	41	62	40	48	3	.6	-.2	.3	5.4	216	13.5	106	91	53	0	0	3	0
SPOKANE	47	33	54	28	40	2	.3	0	.1	2.1	228	4.5	90	98	61	0	3	3	0
YAKIMA	54	32	59	24	43	1	.7	.6	.7	1.0	241	2.7	108	87	40	0	4	1	1
WV BECKLEY	51	31	57	19	41	0	.6	-.4	.3	.8	30	7.7	83	82	40	0	5	3	0
CHARLESTON	57	32	62	24	44	-1	.2	-.7	.1	.2	9	6.8	74	88	36	0	4	2	0
HUNTINGTON	57	35	60	28	46	0	.6	-.3	.2	1.0	36	6.8	78	77	40	0	2	4	0
PARKERSBURG	56	31	65	23	43	-1	.1	-.7	.1	.2	9	3.3	42	67	25	0	5	2	0
WI GREEN BAY	47	25	56	20	36	6	0	-.4	0	.7	57	1.5	44	85	34	0	7	0	0
LA CROSSE	49	31	62	26	40	8	.1	-.4	.1	.8	68	2.2	76	73	34	0	5	1	0
MADISON	48	26	59	22	37	5	.4	-.1	.4	1.2	93	2.5	74	84	37	0	7	1	0
MILWAUKEE	43	30	49	27	36	3	.1	-.5	.1	1.0	61	3.4	76	85	45	0	5	1	0
WAUSAU	50	27	62	22	38	11	T	-.4	T	.3	29	1.0	33	72	22	0	7	0	0
WY CASPER	39	24	52	13	31	-1	.9	.7	.7	1.3	217	4.2	263	95	66	0	7	5	1
CHEYENNE	41	24	57	18	33	1	.8	.6	.4	1.0	168	2.0	143	96	56	0	7	4	0
LANDER	40	27	42	21	33	1	1.3	1.0	.8	1.7	260	4.3	239	92	51	0	7	4	1
SHERIDAN	43	27	55	21	35	3	.6	.4	.3	.7	111	1.9	86	99	62	0	7	4	0
PR SAN JUAN	83	70	87	68	77	-1	4.6	4.1	2.0	5.2	368	7.6	117	91	77	0	0	3	3

Based on 1951-80 normals.

Heating Degree Day Summary Table

CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 3-21-1987
ACCUMULATIONS ARE FROM JULY 1
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

STATE CITY	CALL	WEEK TOTAL	WEEK DEV FROM NORM	WEEK DEV FROM L YR	CUM TOTAL	CUM DEV FROM NORM	CUM DEV FROM L YR	CUM DEV FROM L YR PRCT	CUM DEV FROM L YR PRCT
AL BIRMINGHAM	BHM	45	-36	-29	2454	-171	79	-7	3
AL MOBILE	MOB	8	-30	-31	1548	-62	93	-4	6
AL MONTGOMERY	MGM	31	-30	-22	1988	-144	77	-7	4
AK ANCHORAGE	ANC	236	-51	2	7383	-1267	-599	-15	-8
AK BARROW	BRW	614	49	39	14362	-849	-282	-6	-2
AK FAIRBANKS	FAI	366	-26	44	10819	-1191	-361	-10	-3
AK JUNEAU	JNU	192	-46	3	6955	-1010	-690	-14	-10
AK KODIAK	ADQ	193	-30	1	5856	-732	-512	-11	-8
AK NOME	OME	389	-18	62	9840	-1064	105	-10	1
AZ FLAGSTAFF	FLG	227	14	-6	5683	78	545	1	11
AZ PHOENIX	PHX	35	-7	4	838	-584	84	-38	11
AZ PRESCOTT	PRC	167	12	12	3861	-103	524	-3	16
AZ TUCSON	TUS	61	5	-7	1370	-287	231	-13	20
AZ WINSLOW	INW	142	4	-16	4817	-144	343	-3	9
AZ YUMA	YUM	30	9	18	645	-279	167	-30	35
AR FORT SMITH	FSM	40	-60	-57	2875	-303	-88	-10	-3
AR LITTLE ROCK	LMI	28	-65	-62	2722	-185	76	-6	3
CA BAKERSFIELD	BFL	102	46	37	2010	132	185	7	6
CA EUREKA	EKA	118	-1	31	2848	-536	-71	-16	-2
CA FRESNO	FAT	100	25	34	1933	-374	120	-16	7
CA LOS ANGELES	LAX	67	11	22	905	-288	78	-24	8
CA SACRAMENTO	SAC	102	20	34	2183	-147	91	-6	4
CA SAN DIEGO	SAN	53	11	14	886	-192	135	-10	18
CA SAN FRANCISCO	SFO	99	15	35	2875	-296	82	-12	4
CA STOCKTON	SCK	104	26	38	2203	-186	-38	-5	-1
CO DENVER	DEN	172	-16	-13	4695	-219	-99	-4	-2
CO GRAND JUNCTION	GJT	181	23	22	4682	-232	356	-5	8
CO PUEBLO	PUB	152	-18	0	4607	-36	-47	-1	-1
CT BRIDGEPORT	BDR	188	4	29	4587	52	26	1	1
CT HARTFORD	BDL	199	7	24	5337	108	102	2	2
DE WILMINGTON	ILG	164	6	39	4239	-38	189	-1	5
DC WASHINGTON	DCA	139	9	27	3703	16	158	0	4
FL APALACHICOLA	AQQ	24	-11	1	1021	-324	-149	-24	-13
FL DAYTONA BEACH	DAB	18	-6	9	621	-243	-163	-28	-21
FL FORT MEYER	FMY	0	-6	-1	181	-256	-122	-59	-40
FL JACKSONVILLE	JAX	35	-2	24	1217	-134	22	-10	2
FL KEY WEST	EYW	0	0	0	31	-85	-72	-73	-70
FL MIAMI	MIA	0	-4	-1	105	-93	-118	-47	-53
FL ORLANDO	MCO	2	-11	-5	400	-248	-188	-38	-32
FL TALLAHASSEE	TLH	33	-6	6	1441	-119	-78	-8	-5
FL TAMPA	TPA	3	-14	-5	379	-345	-217	-48	-36
FL WEST PALM BEACH	PBI	0	-2	-2	143	-120	-143	-46	-50
GA ATLANTA	ATL	69	-17	-9	2517	-227	202	-8	9
GA AUGUSTA	AGS	74	0	20	2182	-198	157	-8	8
GA MACON	MCN	59	-4	4	2062	-82	133	-4	7
GA SAVANNAH	SAV	44	-7	20	1618	-205	100	-11	7
HI HILO-HAWAII	ITO	0	0	0	0	0	0	**	**
HI HONOLULU-OAHU	HNL	0	0	0	0	0	0	**	**
HI KAHULUI-MAUI	OGG	0	0	0	1	1	1	**	**
HI LIHUE-KAUAI	LIH	0	0	0	0	0	0	**	**
ID BOISE	BOI	175	11	39	4822	63	-837	1	-15
ID LEWISTON	LWS	143	-11	22	4237	-247	-733	-6	-15
ID POCATELLO	PIH	194	-11	19	5756	-10	-568	0	-9
IL CHICAGO	ORD	174	-25	-41	4953	-507	-950	-9	-16
IL MOLINE	MLI	159	-42	-38	4978	-639	-938	-11	-16
IL PEORIA	PIA	140	-50	-49	4765	-623	-759	-12	-14
IL QUINCY	UIN	114	-65	-64	4487	-568	-714	-11	-14
IL ROCKFORD	RFD	177	-37	-29	5303	-836	-909	-13	-14
IL SPRINGFIELD	SPI	124	-49	-61	4543	-386	-479	-8	-10
IN EVANSVILLE	EVV	93	-49	-60	3925	-268	-112	-6	-3
IN FORT WAYNE	FWA	177	-16	-33	5085	-280	-320	-5	-6
IN INDIANAPOLIS	IND	143	-27	-33	4599	-287	-226	-6	-5
IN SOUTH BEND	SBN	173	-25	-37	5157	-217	-354	-4	-6
IA DES MOINES	DSM	136	-69	-67	4960	-356	-1227	-13	-20
IA DUBUQUE	DBQ	180	-46	-36	5632	-655	-1298	-10	-19
IA SIOUX CITY	SUX	157	-58	-57	5145	-895	-1196	-15	-19
IA WATERLOO	ALO	169	-62	-46	5718	-751	-1233	-12	-18
KS CONCORDIA	CNK	122	-50	-36	4164	-721	-697	-15	-14
KS DODGE CITY	DDC	130	-29	-23	4003	-395	-369	-9	-8
KS GOODLAND	GLD	180	-14	-3	4469	-637	-537	-12	-11
KS TOPEKA	TOP	98	-61	-58	4138	-556	-574	-12	-12
KS WICHITA	ICT	84	-64	-51	3944	-305	-237	-7	-6
KY BOWLING GREEN	BWG	85	-47	-46	3614	-227	77	-6	2
KY LEXINGTON	LEX	126	-19	-26	3983	-221	87	-5	2
KY LOUISVILLE	SDF	109	-30	-36	3750	-250	20	-6	1
LA ALEXANDRIA	AEX	10	-43	-28	1773	-88	198	-5	13
LA BATON ROUGE	BTR	4	-36	-28	1433	-168	101	-10	8
LA LAKE CHARLES	LCH	3	-37	-34	1441	-72	138	-5	10
LA NEW ORLEANS	MSY	4	-32	-24	1314	-116	97	-8	8
LA SHREVEPORT	SHV	20	-40	-31	2125	-3	302	0	17
ME CARIBOU	CAR	242	-36	-39	8146	332	319	4	4
ME PORTLAND	PWM	228	3	30	6099	41	343	1	6
MD BALTIMORE	BWI	149	2	22	4063	-14	120	0	3
MD SALISBURY	SBY	166	24	66	3840	43	304	1	9
MA BOSTON	BOS	204	22	36	4841	211	172	5	4
MA CHATHAM	CHH	212	18	39	4621	-33	247	-1	6
MI ALPENA	APN	237	-26	-34	6292	-483	-510	-7	-7
MI DETROIT	DTW	189	-17	-36	5146	-360	-447	-7	-8
MI FLINT	FNT	207	-20	-32	5493	-368	-522	-6	-9
MI GRAND RAPIDS	GRR	199	-20	-28	5454	-317	-510	-5	-9
MI HOUGHTON LAKE	HTL	211	-47	-52	6231	-551	-571	-8	-8
MI LANSING	LAN	203	-16	-32	5534	-292	-571	-5	-9
MI MARQUETTE	MQT	236	-53	-70	7249	-420	-769	-5	-10
MI MUSKEGON	MKG	189	-32	-40	5369	-321	-417	-6	-7
MI SAULT ST MARIE	SSM	226	-57	-74	6824	-619	-734	-8	-10
MN ALEXANDRIA	AXN	187	-95	-81	6461	-1286	-1597	-17	-20
MN DULUTH	DLH	206	-84	-64	7289	-804	-1291	-10	-15
MN INT'L FALLS	INL	198	-126	-101	7693	-1125	-1358	-13	-15
MN MINNEAPOLIS	MSP	166	-81	-77	5889	-964	-1493	-14	-20
MN ROCHESTER	RST	184	-71	-74	6297	-716	-1375	-10	-18
MN SAINT CLOUD	STC	180	-91	-90	6491	-1092	-1575	-14	-20
MS GREENWOOD	GWO	16	-59	-50	2293	-232	131	-9	6
MS JACKSON	JAN	19	-46	-42	2064	-170	10	-8	0
MS MERIDIAN	MEI	13	-54	-46	2095	-211	-10	-9	0
MO CAPE GIRARDEAU	CGI	54	-77	-71	3579	-374	-56	-9	-2
MO COLUMBIA	COU	80	-80	-83	4110	-457	-441	-10	-10
MO KANSAS CITY	MCI	105	-56	-58	4170	-482	-737	-10	-15
MO SAINT LOUIS	STL	85	-64	-75	3937	-426	-200	-10	-5
MO SPRINGFIELD	SGF	56	-89	-90	3802	-290	-221	-7	-5
MT BILLINGS	BIL	191	-27	26	5147	-742	-844	-13	-14
MT GLASGOW	GGW	222	-46	48	6125	-1362	-1721	-18	-22
MT GREAT FALLS	GTF	225	-18	57	5206	-1076	-1492	-17	-22
MT HAVRE	HVR	215	-39	46	5984	-1217	-1349	-17	-18
MT HELENA	HLN	215	-18	39	6309	-388	-941	-5	-13
MT KALISPELL	FCA	194	-37	22	6483	-267	-756	-4	-10
MT MILES CITY	MLS	206	-27	29	5562	-1077	-1191	-16	-18
MT MISSOULA	MSO	194	-21	29	6263	-84	-582	-1	-9
NE GRAND ISLAND	GRI	162	-39	-24	4715	-894	-880	-16	-16
NE LINCOLN	LNK	142	-55	-43	4614	-948	-964	-17	-17
NE NORFOLK	OFK	169	-48	-42	5030	-1028	-1093	-17	-18
NE NORTH PLATTE	LBF	188	-22	-8	4933	-896	-1064	-15	-18
NE OMAHA	OMA	150	-41	-53	4721	-707	-1152	-13	-20
NE SCOTTSBLUFF	BFF	210	5	13	5249	-310	-743	-6	-12
NE VALENTINE	VTN	210	-21	-24	5407	-773	-1099	-13	-17
NV ELY	ELY	226	6	24	5964	-58	229	-1	4
NV LAS VEGAS	LAS	89	19	31	2093	-283	376	-9	22
NV RENO	RNO	185	15	22	4428	-361	58	-8	1
NV WINNEMUCCA	WMC	221	37	50	5217	107	115	2	2
NH CONCORD	CON	233	8	42	6282	97	231	2	4
NJ ATLANTIC CITY	ACY	186	23	49	4346	77	284	2	7
NM ALBUQUERQUE	ABQ	134	5	-7	4001	139	607	3	18
NM CLOVIS	CVS	100	-24	-29	3477	-101	115	-3	3
NM ROSWELL	ROW	74	-9	-30	3105	225	466	8	18
NY ALBANY	ALB	223	9	27	5936	121	166	2	3
NY BINGHAMTON	BGM	219	-12	2	5792	-245	-189	-4	-3
NY BUFFALO	BUF	208	-12	-19	5422	-171	-52	-3	-1
NY NEW YORK	LGA	163	0	27	4035	-132	42	-3	1
NY ROCHESTER	ROC	221	4	-5	5670	111	45	2	1
NY SYRACUSE	SYR	219	2	6	5740	111	140	2	2
NC ASHEVILLE	AVL	123	-3	-4	3607	-111	113	-3	3
NC CAPE HATTERAS	HAT	157	56	92	2147	-200	185	-9	9
NC CHARLOTTE	CLT	113	13	31	2904	-119	178	-4	7
NC GREENSBORO	GSO	141	23	46	3439	-12	251	0	8
NC NEW BERN	EWN	125	37	67	2446	-149	315	-6	15
NC RALEIGH DURHAM	RDU	136	24	52	3144	-31	301	-1	11
NC WILMINGTON	ILM	131	31	60	2214	-68	344	-3	18
ND BISMARCK	BIS	216	-53	5	6685	-951	-1081	-12	-14
ND FARGO	FAR	178	-104	-80	6742	-1169	-1577	-15	-19
ND GRAND FORKS	GFK	198	-98	-45	7276	-1029	-1526	-12	-17
ND WILLISTON	ISN	220	-55	29	6681	-1074	-1068	-14	-14
OH AKRON-CANTON	CAK	201	8	-11	5013	-223	-131	-4	-3
OH CLEVELAND	CLE	217	23	3	4916	-246	-240	-5	-5
OH COLUMBUS	CMH	159	-12	-25	4466	-405	-156	-8	-3
OH CINCINNATI	CVG	138	-19	-23	4260	-291	-98	-6	-2
OH DAYTON	DAY	160	-14	-26	4624	-263	-172	-5	-4
OH TOLEDO	TOL	200	-3	-18	5161	-364	-294	-7	-5
OH YOUNGSTOWN	YNG	206	3	-9	5218	-245	-39	-4	-1
OK OKLAHOMA CITY	OKC	60	-51	-46	3176	-291	-12	-6	0
OK TULSA	TUL	43	-66	-67	3228	-166	38	-5	1
OR ASTORIA	AST	135	-11	31	3492	-386	-449	-10	-11
OR BURNS	4BW	203	3	13	5833	316	-914	6	-14
OR MEDFORD	MFR	145	10	39	3664	-179	32	-5	1
OR PENDLETON	PDT	149	3	30	4405	72	-823	2	-16
OR PORTLAND	PDX	122	-11	24	3316	-376	-525	-10	-14
OR SALEM	SLE	135	-5	37	3620	-210	-344	-5	-9
PA ALLENTOWN	ABE	196	-5	25	4933	-8	148	0	3
PA ERIE	ERI	220	3	4	5076	-410	21	-7	0
PA HARRISBURG	CXY	158	-8	4	4662	75	179	2	4
PA PHILADELPHIA	PHL	160	2	34	4182	-80	136	-2	3
PA PITTSBURGH	PIT	180	-1	-13	4790	-259	-10	-5	0
PA SCRANTON	AVP	204	7	26	5467	132	270	2	5
RI PROVIDENCE	PVD	195	6	37	4897	12	191	0	4
SC CHARLESTON	CHS	65	5	28	1809	-196	160	-10	10
SC COLUMBIA	CAE	92	15	35	2410	-27	202	-1	9
SC FLORENCE	FLO	98	23	58	2336	-34	447	-1	24
SC GREENVILLE	GSP	103	5	26	2985	50	267	2	10
SD ABERDEEN	ABR	193	-64	-42	6164	-1123	-1665	-15	-21
SD HURON	HON	174	-71	-71	5694	-1212	-1817	-18	-24
SD RAPID CITY	RAP	226	1	9	5439	-565	-1124	-9	-17
SD SIOUX FALLS	FSD	175	-64	-67	5728	-1008	-1594	-15	-22
TN CHATTANOOGA	CHA	68	-41	-23	2868	-364	43	-11	2
TN KNOXVILLE	TYS	84	-24	-25	3247	-48	39	-1	1
TN MEMPHIS	MEM	17	-80	-71	2699	-251	78	-9	3
TN NASHVILLE	BNA	57	-57	-62	3196	-192	186	-6	3
TX ABILENE	ABI	29	-40	-40	2467	38	236	2	11
TX AMARILLO	AMA	117	-11	-13	3795	85	112	2	3
TX AUSTIN	AUS	6	-36	-23	1505	-170	193	-10	15
TX BROWNSVILLE	BRO	0	-8	-11	626	24	152	4	32
TX CORPUS CHRISTI	CRP	0	-21	-14	974	27	201	3	26
TX DEL RIO	DRT	49	19	26	1469	4	271	0	23
TX EL PASO	ELP	69	2	-42	2736	246	376	10	16
TX FORT WORTH	DFW	24	-43	-46	2220	60	123	3	6
TX GALVESTON	GLS	0	-35	-17	1123	-79	184	-7	20
TX HOUSTON	IAH	1	-38	-27	1406	-76	268	-5	24
TX LUBBOCK	LBB	81	-20	-22	3148	-30	244	-1	8
TX MIDLAND ODESSA	MAF	58	-14	-19	2659	188	361	8	16
TX BEAUMONT	BPT	1	-35	-23	1332	-87	229	-6	21
TX SAN ANGELO	SJT	40	-18	-30	2330	157	365	7	19
TX SAN ANTONIO	SAT	12	-25	-21	1480	-59	299	-4	16
TX VICTORIA	VCT	0	-29	-22	1190	-38	216	-3	22
TX WACO	ACT	16	-36	-39	2012	16	204	1	11
TX WICHITA FALLS	SPS	47	-39	-46	2729	-55	80	-2	3
UT BLANDING	4BL	196	16	14	4946	-109	359	-2	8
UT CEDAR CITY	CDC	216	37	31	5842	174	429	4	9
UT SALT LAKE CITY	SLC	173	6	13	4814	-24	168	0	3
VT BURLINGTON	BTV	242	-2	11	6585	2	115	0	2
VA LYNCHBURG	LYH	158	27	51	3861	61	274	2	8
VA NORFOLK	ORF	159	47	66	2989	-53	211	-2	8
VA RICHMOND	RIC	157	37	72	3610	82	380	2	12
VA ROANOKE	ROA	153	25	33	3815	33	261	1	7
WA COLVILLE	63S	158	-34	14	5144	-697	-932	-12	-15
WA QUILLAYUTE	UIL	148	-13	26	3985	-431	-582	-10	-11
WA SEATTLE-TACOMA	SEA	119	-28	5	3508	-443	-460	-11	-12
WA SPOKANE	GEG	173	-18	19	5424	-152	-807	-3	-13
WA WALLA WALLA	ALW	135	2	19	4118	96	-831	2	-17
WA YAKIMA	YKM	152	-7	26	4938	-52	-900	-1	-15
WV BECKLEY	BKW	166	3	-13	4524	-200	144	-4	3
WV CHARLESTON	CRW	142	6	-6	3964	-134	433	-3	12
WV HUNTINGTON	HTS	132	-2	-15	3928	-152	206	-4	6
WV PARKERSBURG	PKB	150	2	-19	4238	-55	25	-1	1
WI GREEN BAY	GRB	202	-48	-65	6101	-674	-972	-10	-14
WI LACROSSE	LSE	170	-65	-71	5704	-765	-1304	-12	-19
WI MADISON	MSN	194	-38	-39	5790	-658	-1049	-10	-15
WI MILWAUKEE	MKE	199	-27	-25	5331	-683	-802	-11	-13
WI WAUSAU	AUW	185	-76	-85	6364	-810	-1117	-11	-15
WY CASPER	CPR	234	4	27	5946	-187	-296	-3	-5
WY CHEYENNE	CYS	224	-7	7	5564	-210	-176	-4	-3
WY LANDER	LND	221	-7	26	6459	46	-404	1	-6
WY SHERIDAN	SHR	208	-23	4	5631	-714	-810	-11	-13

National Agricultural Summary

March 16 to 22, 1987

HIGHLIGHTS: Precipitation slowed land preparation and seeding across most of the eastern half of the Nation. Winter wheat and small grains experienced little damage from the freezing temperatures and wet, cold weather from northern Texas, up through the central and northern Great Plains, and across the Rocky Mountain States. The wet snow was beneficial, providing additional moisture and protection. Soil moisture was adequate in most areas. Farmers were able to work 3 days or less in the eastern half of the Nation. In the central Plains, fieldwork was limited to less than 2 days.

Winter wheat was mostly good. Wheat developed from heading in the Southeast and Southwest to greening and dormant in Montana. Rain and wet fields slowed corn planting. Seeding was behind normal in Georgia, Louisiana, and Texas. Cotton planting was 2 percentage points ahead of normal in Texas. Planting continued in Arizona but awaited warmer soils in California. Rice seeding moved into Texas but ended the week behind normal in both Texas and Louisiana. Tobacco was transplanted in Florida and Georgia. Livestock was mostly good, but the cold weather caused problems in the northern Plains.

SMALL GRAINS: Wet, cold weather and below freezing temperatures blanketed the Nation's midsection from Montana to northern Texas but caused very little damage to winter wheat and small grains. Ample moisture enhanced growth in the Delta and Southeast. Wheat was mostly good, except in the Delta where conditions were mostly fair to good.

In Kansas, rain promoted good wheat growth but halted topdressing and weed control. Wheat streak mosaic disease was present in western areas, and soil borne mosaic disease concerned wheat producers in central and eastern Kansas. Oat and barley seeding was 70 and 65 percent (%) finished, respectively. Seeding progressed well before the rains. Early oat emergence was good. South Dakota's winter grains were good. Winter wheat was mostly good to fair in Montana. Seventy-four percent of the crop was greening, and a small percentage of the acreage began growing.

Moisture and favorable temperatures increased growth significantly in Oklahoma. Wet fields limited fertilizing and weed spraying to ariel applications. Flooding damaged some wheat in southern Oklahoma, and Russian aphids and greenbugs were in the Panhandle. Light rain improved small grain growth in Texas. Weed control measures increased as the weather cleared. Rust was becoming more of a problem in the Blacklands. Early planted wheat was heading in central and southern areas and in the Blacklands.

Forty-seven percent of Georgia's wheat acreage was jointing and 50% was jointing in Mississippi. Louisiana wheat was fair to good, and 3% of the acreage reached the heading stage compared with the 7% 5-year average. Wheat and barley were heading in Arizona. Irrigation and fertilization continued as needed, and insecticides were applied to control aphids. Rain and warmer temperatures stimulated small grain growth in California. Crop condition was excellent, and some small grains began forming heads.

OTHER CROPS: Wetness slowed field activity throughout most of the eastern half of the Nation. Fieldwork was behind schedule in Alabama and Louisiana.

Corn planting was restricted mostly to the Southeast and Southwest. Georgia's corn acreage was 11% planted, more than 3 times slower than normal. In Louisiana, only 3% of the acreage was seeded, 32 points behind normal. Emergence was just beginning. Planting was 13 points below the 19% average in Mississippi. In Texas, corn planting increased significantly at Coastal Bend. Planting progressed well in eastern and central areas, but fields were too wet to support equipment in the Blacklands. In the Rio Grande Valley, corn was emerged and growing, and most fields established good stands. Seeding was one-third finished.

Cotton planting moved ahead in western Arizona and was just getting underway in central areas. Preplant operations continued. Cotton seeding awaited warmer soils in California. Planting continued at Coastal Bend and in the Rio Grande Valley. Planting reached 6% completion, 2 points ahead of normal.

Rice was 6% planted and 2% emerged in Louisiana. Eight percent normally would be planted and 3% emerged. In Texas rice planting was underway along the upper coast. Seeding reached 3% completion, compared with 10% in 1986 and the 6% average.

Sorghum seeding was running 15 points behind normal in Texas, at 20% completion. Growers may substitute sorghum for corn in areas where it is getting late to plant corn.

Tobacco transplanting progressed slowly in Florida. Transplanting was just getting started in Georgia with 1% transplanted. Last year, 8% was transplanted by this time and 12% would normally have been set. Tobacco bed preparation continued in Kentucky and began in Indiana. Tobacco beds were prepared in North Carolina and Virginia.

FRUIT AND NUTS: Georgia peaches were good to excellent and 64% of the crop was blooming, 14 points behind 1986. Producers were spraying and thinning blossoms. In South Carolina, peaches were near full bloom along the Ridge. Upstate peaches should reach full bloom within a week. Peach set was good in east and south Texas. Some varieties continued blooming, and trees were sprayed in the east.

Citrus groves were very good in Florida. Most trees reached full open bloom, and some young trees dropped petals. Early orange harvest neared completion, but grapefruit movement was active along the east coast. Temple harvest slowed. Lemons, valencia oranges, and grapefruit were picked in Arizona. Tangerine harvest neared completion. Stone fruits, apples, pomegranates, persimmons, almonds, and walnuts leafed-out in California. Kiwifruit neared the bud-break stage. Navel oranges, lemons, and minneola tangelo were mostly harvested.

VEGETABLES: Vegetable planting continued across the Southeast. White potatoes and early vegetables were planted in New Jersey. Onions were planted in Idaho.

Seasonal weather continued over Florida's vegetable producing areas. Strong wind caused very little damage. Wetness delayed watermelon planting in northern areas. Early spring and winter vegetable harvest was active. Strawberry harvest was in full swing. Vegetable harvest and planting continued in Texas despite rain. Vegetable harvest consisted mostly of lettuce, bok choy, endive, carrots, greens, spinach, cauliflower, broccoli, cabbage, and asparagus in California and Arizona.

PASTURES AND LIVESTOCK: Livestock was mostly good. The cold weather caused lambing and calving problems in the northern Plains. Livestock experienced problems with bloat in Oklahoma and Texas. Pastures were mostly good.

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Rainfall totals mostly 1.00 to 2.00 in. Greatest weekly total 2.63 in. Temperatures averaged 5° above normal.

Days suitable for fieldwork 3.0. Soil moisture 34% adequate, 66% surplus. Fieldwork progress still behind schedule. Corn planted 22%, 19% 1985, 22% avg. Wheat 3% poor, 61% fair, 33% good, 3% excellent. Pastures mostly fair to good. Livestock good to fair. Pasture feed supply short to adequate. Stored feed supply adequate to short. Primary activities: Land preparation; soil testing; planting corn, vegetables; repairing fences, equipment; fertilizing pastures; spraying orchards; routine care of livestock, poultry.

ARIZONA: Winter storm from Pacific northwest pushed across State 16th, causing locally heavy rain, snow. Snow level 4,000 ft., 1 to 4 in. central basins, 4 to 11 in. Grand Canyon, Mogollon Rim, White Mountains. Gusty winds to 59 mph Douglas, 50 mph Winslow. Temperatures 16th 10 to 25° lower than 14th. Sunny skies 17th, 18th. Low pressure system arrived 19th. Snow showers 5,000 ft. north, 1 to 4 in. No precipitation reported south. Sunny skies returned 20th. Winter storm spread precipitation statewide late 21st, 22nd, snow level 4,000 ft. One to 3 in. central basins, 3 to 7 in. central mountains, traces to 2 in. southeastern valleys. Average temperatures for week 1 to 7° below normal.

Cotton planting moved ahead west, got underway central. Preplant operations continued. Wheat, barley good, 85% jointing, 15% heading. Irrigation, fertilization continued as needed; insect controls applied for aphid. Hay harvesting proceeded west, crop good to excellent. Curing conditions favorable, except during strong wind. Sheeping off light, almost complete. Planting corn light, crop good. Movement of lettuce underway Harquahala Valley, continued strong Yuma, progressed Parker-Poston. Lettuce packing Casa Grande expected 29th. Marana-Eloy district lettuce good. Seasonal packing winter vegetables continued Yuma County, central valley. Shipments included romaine, leaf and boston lettuce, endive, bok choy both areas; carrots, greens, rapini, radishes, spinach, turnips, celantro Salt River Valley; cauliflower, broccoli, cabbage, napa, asparagus Yuma; few artichokes packed, shipped Parker-Poston. Spring melon planting near completion. Onions central valley progressing well. Lemons, valencia oranges, grapefruit picked, packed, shipped limited amounts Yuma. Tangerine harvest neared completion. Groves good.

ARKANSAS: Very warm week. Heavy rain statewide on 17th. Otherwise dry week. Temperature extremes 31°; 86°. Rainfall 0.74 to 3.83 in.

Rains limited soil preparation. Oats, wheat progressed well. No fruit damage from cold weather. Pastures, livestock good.

CALIFORNIA: Cold northwest flow over State much of week, brought cold storms in from Gulf of Alaska. Snow in mountains. Temperatures near normal to much below normal over region with freezing or near freezing occurring locally at lower elevations by weekend.

More rain and warmer temperatures stimulated growth, small grains. Some fields forming heads, excellent conditions. Sugarbeets cultivated, thinned. Mixed grain being green-chopped. Corn, cotton waiting warmer soil temperatures. First cutting alfalfa San Joaquin Valley. Rain, hail, cold damaged some crops. Stone fruits, apples, pomegranates, persimmons leafed out. Apricot set good. Kiwi neared bud break. Prunes in various bloom stages. Almonds, walnuts leafed out. Navels, lemons, minneola tangelo harvests neared completion. Artichokes moderate supply quality improving, Salinas. Asparagus harvest continued Fresno, broccoli harvest slowing. Salinas, Santa Maria broccoli fairly heavy supply, good quality. Cauliflower continued moderate supply Salinas, Santa Maria, good quality. Harvest expected Huron area two to three weeks. Strawberry harvest continued light Anaheim area, some traces bird damage, decay, cat faces. Lettuce harvest starting Huron area, most fields still irrigated, sprayed for pest, fungus. Firebaugh area first harvest late April. Tomatoes, mixed melons planted many areas. Some growers replanted tomatoes, melons after frost damage. Other vegetables packed: Green onions, mustard, collard greens, kale, turnips, chard, parsley, beets, diakon, choy sum. Most vegetables sugar peas, eggplants, red onions, garlic showing good growth due warm weather, rain. Rains continued improve range, pasture conditions. Livestock showed weight gains grass growth increased. Supplemental feeding tapered off. Stock water supplies remained low.

COLORADO: Temperatures 1 to 6° above normal. Significant moisture all areas. Amounts to 2.11 in.; most areas less than 1.00 in.

Less than 1.0 days suitable for fieldwork. Livestock, winter wheat good. Calving, lambing continued.

FLORIDA: Cold front, 19th, brought 1.00 to 2.00 in. of rain Panhandle; less than 1.00 in. Peninsula. Otherwise, fair with mild days, cool nights.

Soil moisture mostly adequate, surplus some northern, Panhandle areas. Land preparation, plantings delayed by wet soils. Corn planting underway drier areas. Light tobacco transplanting underway. Small grains good progress. Sugarcane harvest winding down. Southern Peninsula pastures good to excellent; elsewhere fair to good. Cattle fair to good. Citrus groves very good. Light rain some areas; irrigation, drier groves. Full open bloom, with some petal drop on young trees. Early orange harvest almost over. Grapefruit movement active east coast. Temple harvest slowed. Seasonal weather continued over vegetable producing areas. Rainfall limited; moderate to strong winds; very limited damage. Wet soils northern areas delayed watermelon planting. Harvest active winter, early spring crops. Volume leaders: Tomatoes, celery, potatoes, cabbage. Good supplies carrots, snap beans, lettuce, squash, radishes, cukes, sweet corn. Strawberry harvest full swing. Berry size, quality good

GEORGIA: Temperatures near to slightly above normal. Extremes 26° Blairsville on 22nd, 82° Columbus on 22nd. Rain totals 1.00 in. except east 0.67 in. or less. Most rain 2.43 in. Bainbridge. Rain 1 to 2 days. Mean 4 in. soil temperatures low 50s north, low 60s elsewhere.

Days suitable for fieldwork 2.4. Soil moisture 1% short, 25% adequate, 74% surplus. Corn 6% very poor, 26% poor, 16% fair, 34% good, 18% excellent; 11% planted, 40% 1986, 34% avg. Tobacco 51% fair, 49% good; 1% transplanted, 8% 1986, 12% avg. Watermelons fair to good; 25% planted, 36% 1986, 39% avg. Wheat 6% poor, 41% fair, 45% good, 8% excellent; 47% jointing, 58% 1986; 5% boot, 6% 1986. Apples good; 1% blooming, 9% 1986. Peaches 59% good, 41% excellent; 64% blooming, 78% 1986. Pastures good to fair. Cattle good to fair. Hogs mostly good. Main activities: Fertilizing pastures, small grains; land preparation and planting where possible, delayed by wet soils; peach spraying, blossom thinning; routine livestock, poultry care.

HAWAII: Wet, windy conditions during first half of week slowed farm activity, caused some minor crop losses. Skies cleared by midweek. Overall, crops made fair to good progress. Temperatures averaged degree or 2 above normal for most of week. Variable winds north, northeasterly 15 to 30 mph. Temperatures ranged mid 60s to low 80s. Rainfall ranged none to 9.10 in.

Days suitable for fieldwork 7.0. Banana production remained steady. Papaya production on seasonal decline. Production heavy for chinese cabbage, light to moderate for other vegetables.

IDAHO: Above normal precipitation central, south. Precipitation lighter north, 0.10 to 0.20 in. below normal. Seasonable temperatures statewide, within 5° of normal.

Farm activity limited to machinery maintenance, fertilizer spreading, livestock feeding, calving in full swing, lambing neared completion. Some grain, sugarbeet, onions planted. Livestock good. Hay, roughage supplies adequate to surplus.

ILLINOIS: Temperatures averaged 3 to 7° above normal. Precipitation widespread, 0.33 to 0.75 in. central and north; 1.00 to 1.50 in. south.

Winter wheat mostly good to fair. Livestock mostly good.

INDIANA: Temperatures averaged above normal. Lows mid 20s, highs mid 60s. Precipitation widespread, light. Generally 0.10 to 0.33 in. South 0.50 to 1.00 in.

Spring fieldwork active. Activities: Seeding oats, tilling, spreading fertilizer, hauling manure, seeding clover, grass seed, machinery repair, preparing tobacco beds, purchasing supplies.

IOWA: Temperatures 10° above normal; ranged 31° low Waterloo 20th, high 69° Sioux City 20th. Precipitation near normal northeast third to 2.30 in. northwest. Weekly total exceeded 4.00 in. Sioux City. Primghar measured 3.10 in. 23rd.

Livestock continued good. Feed supplies remained adequate. Weather remained mild allowing farmers to start fieldwork.

KANSAS: Temperatures 43° northwest, mid and upper 50° east and south. Departures from normal, 5° above west, 10 to 13° above east. Rainfall averaged 1.00 in. west, 2.50 in. northeast. Three to 5.00 in. some northeast, east central counties.

Days suitable for fieldwork 1.5. Soil moisture 3% short, 27% adequate, 70% surplus. Wheat 1% very poor, 1% poor, 10% fair, 29% good, 59% excellent. Recent rains provide excellent moisture, good growth evident but topdressing, weed control halted. Wheat streak mosaic western areas, soil borne mosaic mostly central, east. Insect infestations light. Oats seeding 70%, barley 65%. Seeding good progress before rains, oats good early emergence. Range, pasture good for time of year. Alfalfa starting to grow. Feed grain, hay, forage good supply.

KENTUCKY: Considerable cloudiness early, rain brought an average of 1.00 in. precipitation. Beautiful sunshine late. Temperatures averaged around 5° above normal.

Field activity picking up as warm, dry weather ushered in spring. Many tobacco beds prepared. Fall seeded grains green, showing new growth. Wheat being fertilized. Livestock wintered well, many newborn calves.

LOUISIANA: Temperature 3 to 7° above normal. Temperature extremes 34°; 85°. Rainfall averaged 0.54 to 3.72 in.

Days suitable for fieldwork 2.5. Soil moisture 41% adequate, 59% surplus. Spring plowing 14% complete, 55% 1986, 38% avg. Corn planted 3%, 47% 1986, 35% avg. Corn emerged 1%, 29% 1986 13% avg. Rice planted 6%, 11% 1986, 8% avg. Rice emerged 2%, 4% 1986, 3% avg. Winter wheat fair to good; 3% headed, 13% 1986, 7% avg. Vegetables fair; sugarcane, pastures, livestock fair to good. Main activities: Spring plowing; planting corn, rice, home gardens; applying fertilizer; harvesting strawberries.

MARYLAND & DELAWARE: Maryland: Average temperature 44°, normal 41°; lowest temperature 9°, highest temperature 63°. Precipitation averaged 0.15 in.

Main farm activity caring for livestock.

Delaware: Average temperature 43°, normal 41°. Trace precipitation.

Main farm activity caring for livestock.

MICHIGAN: Temperatures ranged 1 to 7° above normal. Temperature extremes 8°; 59°. Precipitation ranged from none to 0.01 in. across State.

Snow cover virtually gone statewide. Winter wheat greening-up. Activities: Plowing well drained fields, spreading fertilizer, attending farm auctions, topdressing wheat, pruning fruit trees, collecting maple syrup, completing tax forms, buying spring supplies, marketing grain, potatoes, livestock, fruits, vegetables. Livestock excellent. Cattle on pastures. Feed supplies remained adequate. Calves, young pigs, lambs good.

MINNESOTA: Temperatures averaged 10 to 17° above normal. Temperature extremes 14°; 68°. Precipitation averaged 0.30 to 0.76 in. above normal west central, southwest; 0.30 to 0.37 in. below normal northeast, east, central, southeast; near normal elsewhere. Greatest weekly total 1.70 in. Snowfall averaged trace or less for State. Snow depth weekend averaged trace to 1 in. extreme north, near zero elsewhere.

Limited fieldwork underway southern area. Farmers preparing for early spring. Mild weather made life easier for livestock.

MISSISSIPPI: Temperatures 6° above normal; extremes 36°; 84°. Storm system produced tornadoes and heavy rain early in week, pleasant latter part of week. Greatest 24-hour total rainfall 6.60 in. Vicksburg on 18th.

Days suitable for fieldwork 1.7, 2.1 1986, 2.8 avg. Soil moisture surplus. Corn 6% planted, 25% 1986, 19% avg. Wheat 50% jointing, 66% 1986, 41% avg; fair to good. Watermelons 9% planted, 13% 1986, 12% avg.

MISSOURI: Temperatures averaged 8 to 10° above normal. Precipitation averaged over 1.25 in. except central counties less than 1.00 in.

Fieldwork made good progress until interrupted by weekend rain. Pastures made good growth.

MONTANA: Temperatures cooled to 1 to 9° above normal across State. Moisture finally came, many stations moisture ranged from 0.50 in. to over 1.00 in.

Topsoil moisture 14% short, 82% adequate, 4% surplus. Subsoil moisture 18% short, 82% adequate. Winter wheat 36% fair, 64% good, helped by wet snow. About 20% crop dormant, 74% greening, 6% growing. Field tillage started 60% of State. Calving 53%, lambing 47% finished.

NEBRASKA: Rainfall ranged 1.00 to 3.00 in. Local amounts up to 5.00 to 6.00 in. northeast and central portions of State, some flooding. Average temperatures ranged near normal Panhandle to 10° above normal east. Temperature extremes 17°; 72°.

Precipitation provided needed soil moisture, statewide. No major problems reported in winter wheat crop.

NEVADA: Series Pacific storms experienced. Week started cold, replaced by dry northerly flow. Next storm midweek brought scattered precipitation. Last storm end of period mostly wind. Most precipitation northeast, all other areas some but mostly light. Average temperatures generally few degrees below normal. Extremes 0°; 82°.

Fieldwork delayed third consecutive week by inclement weather. Cattle, sheep mostly good.

NEW ENGLAND: Precipitation averaged 1.00 to 1.25 in. Maine, 0.25 to 0.50 in. New Hampshire, northeast Vermont, 0.05 to 0.15 in. remainder. Temperatures averaged 1° below normal south, 1 to 2° above normal north, 8° above normal northern Maine.

Major farm activities: Tending livestock, moving crops from storage, machinery repair. Maple sugaring full swing, weather not conducive to good sap runs.

NEW JERSEY: Temperatures averaged below normal. Extremes 18°; 60°. Rainfall averaged 0.03 in. north, 0.06 in. central, 0.08 in. south. Heaviest 24-hour total 0.17 in. on 21st, 22nd. Estimated soil moisture percent field capacity averaged 98% north, 97% central, south. Four inch soil temperatures averaged 33° north, 38° central, 39° south.

Soil preparation, fertilizing, liming increased; some fields too wet. White potato, early vegetable planting advanced slowly. Warmer weather would be beneficial.

NEW MEXICO: Temperatures ranged from 1 to 4° above normal east, 1 to 4° below normal west. Cold front near end of week brought rain or snow to most central, northern areas. Precipitation ranged from none south to 1.28 in. northeastern plains.

Days suitable for fieldwork 6.5. Soil moisture 11% short, 83% adequate, 6% surplus. Alfalfa mostly good. Barley 27% fair, 64% good, 9% excellent. Irrigated wheat 17% fair, 66% good, 17% excellent. Dryland wheat 14% poor, 14% fair, 55% good, 17% excellent. Chile, onions, lettuce all good. Cattle fair to good. Sheep good to fair. Ranges mostly fair to good.

NEW YORK: Dry weather continued in most areas. Several inches of snow northeastern mountains, but light accumulations reported elsewhere. Daytime temperatures averaged near normal while night time lows lower than average.

Fieldwork not begun. Winter chores continued occupying producers time.

NORTH CAROLINA: Temperature 5 to 6° below normal Coastal Plain Region, 1 to 4° remainder of State. Temperature extremes 24°; 72°. Precipitation ranged from 0.37 to 1.86 in. across State.

Days suitable for fieldwork 3.4. Soil moisture 63% adequate, 37% surplus. Small grains mostly good. Pasture fair to good. Tobacco plantbeds 48% fair, 52% good. Hay, roughage supplies mostly adequate to short. Feed grain supplies adequate to short. Major farm activities: Topdressing small grains, pasture, hay; seeding, preparing tobacco plantbeds; tending livestock; preparing land; maintaining equipment; planting spring Irish potatoes, cabbage; pruning fruit trees; transplanting Christmas trees; cutting firewood; spreading lime; general farm maintenance.

NORTH DAKOTA: Temperatures slightly above normal southwest, 10° above east central. Extremes 14° northeast, 59° east central. Precipitation above normal; 0.40 in. northeast, 1.40 in. southwest, mostly snow. Storm dumped 1 ft. snow some areas southwest.

Severe, wet weather, statewide deteriorated calving, lambing conditions. Dry bedding areas scarce. Roads difficult most areas. Seeding 2 to 3 weeks away.

OHIO: Temperatures averaged 1 to 2° above normal. Morning lows kept averages close to normal. Temperature extremes wide ranged low teens north to high 60 south. Precipitation spotty and light, 0.75 in. below normal. Very dry soils working well. Majority of State less than 20% of ground to be plowed considerably more northeast.

Winter wheat good, not yet broken dormancy in heavy northwestern producing area. Good color, rain is needed. Topdressing neared completion. Oats sown throughout, moisture needed for adequate germination. No sugarbeets planted lake bed area. Dry onion seeding muck land, earliest ever. Cabbage plants set southeast. Greenhouse bedding plants moving southern counties.

OKLAHOMA: Temperatures averaged 3° above normal Panhandle to 12° above normal northeast, east central. Precipitation averaged 0.45 in. west central to 2.56 in. east central.

Topsoil moisture 30% adequate, 70% surplus. Subsoil moisture 100% adequate. Wheat 14% fair, 85% good, 1% excellent; 15% jointing, 30% 1986, 20% avg. Growth increased significantly under favorable temperatures, moisture conditions. Wet fields limited fertilizing, weed spraying to aerial applications. Some flood damage south. Russian aphids, greenbugs observed Panhandle. Farmers need dry weather for fieldwork. Pastures mostly good to fair. Cattle mostly good. Minor bloat problems southwest. Calving continued, no major problems.

OREGON: Temperatures near normal except south coast, northeast averaged 2° below normal. Rain continued across State. Precipitation totaled 2.10 in. high plateau; 1.00 to 1.50 in. along coast, north Cascades; 0.50 in. or less remaining areas.

Soil moisture adequate to surplus. Winter grains, grass seeds continued good development. Some spring seeding, fertilizing continued. Tree fruit progress continued ahead of normal. Livestock, range, pastures good to excellent. Calving continued eastern high country.

PENNSYLVANIA: Dry, sunny. Average temperature 37°, normal 37°. Temperature extremes 11°; 63°. Average precipitation 0.01 in., 0.80 in. below normal.

Activities: Hauling manure; machinery maintenance; caring for livestock; early spring activities.

PUERTO RICO: Island average rainfall 2.94 in. 2.34 in. above normal. Highest weekly total 16.46 in. Highest 24-hour total 11.22 in. Temperature averaged about 73 to 74° on coasts; 70 to 71° interior divisions. Mean station temperature ranged from 62 to 77°. Extremes 47°;91°. San Juan mean temperature 77°, 1° below normal. Total rainfall 5.33 in., 3.84 in. above normal.

SOUTH CAROLINA: Temperatures averaged 1 to 3° below normal. Rainfall midweek; cleared by weekend with sunny, warm weather across State. Rainfall for month 1.00 to 2.00 in. below normal.

Planting some vegetable crops continued, activity light. Peaches very near full bloom in Ridge, with upstate peaches reaching full bloom by end of week. Peaches good. Land preparation continued for spring planting.

SOUTH DAKOTA: Average temperatures 1 to 4° below normal southwest, 1 to 10° above normal elsewhere. Extremes 17°; 71°. Black Hills low 14°. Precipitation above normal west and central; 10 to 20 in. snow fell. Melted precipitation 4.16 in. or less.

Winter grains good. Some soil washing possible with large amounts of precipitation received. Livestock good. Major agricultural activities; tending livestock, planning for spring planting, attending farm meetings.

TENNESSEE: Temperatures averaged 13 to 16° above normal west; near normal middle, east. Extremes 29°; 82°. General rain early week averaged over 1.00 in. Ranged from 0.60 in. Nashville to 2.32 in. Memphis.

Rain impeded fieldwork progress. Winter wheat, pastures good growth.

TEXAS: Pacific systems continued past State last week. First storm system moved eastward, triggered widespread rains. Drier air quickly moved in behind storm, brought sunny skies. Late week minor system slipped caused light showers. Main storm path northern part State. Rainfall above normal most areas, except Rio Grande Valley, Trans-Pecos, Upper Coast. Temperatures above normal.

Crops: Small grains another good week progress, growth, development. Light rain mixed with snow High Plains added available moisture for good progress. Spraying weeds increased as weather cleared. Excellent growth. Light rains early week improved growth Blacklands; rust more problem. Early planted fields heading. Central, south fields excellent progress because added moisture. Weeds problem. Many fields heading. Oats good grazing. Wheat 1% headed, 2% 1986, 1% avg. Corn, grain sorghum planting increased significantly Coastal Bend. Planting progressed east, central. Many fields too wet for machinery Blacklands; some progress later in week. Planted fields Rio Grande Valley up, growing; most stands good. Planting progress behind last year, average; producers may substitute grain sorghum for corn planting too far behind. Corn 33% planted, 60% 1986, 40% avg. Sorghum 20% planted, 49% 1986,35% avg. Cotton planting continued Coastal Bend, Rio Grande Valley. Cotton 6% planted, 7% 1986, 4% avg. Initial rice planting underway Upper Coast. Rice 3% planted, 10% 1986, 6% avg. Other field crops: Sugarbeets none planted, 1% 1986, 2% avg.

Commercial Vegetables: Rio Grande Valley, onion harvest underway. Later developing onions maturing well. Melons up, growth slow. San Antonio-Winter Garden spinach, cabbage, carrots, onion plant harvests continued. Some early watermelons emerged. Trans-Pecos, cantaloup planting continued. Onions progressed. East wet conditions slowed sweetpotato bedding, planting other vegetables. High Plains potato, onion planting continued despite early week moisture. Peach set good east, south. Some varieties continued bloom. Spraying continued east. Frost damage minor last week.

Range and Pasture: Range, pastures good. Additional moisture helped growth, greening. Oats provided good grazing central, southern areas. Many stockers moved off wheat pastures; some bloat young stockers still on lush pastures. Calving, lambing continued. Goat shearing continued Hill Country.

UTAH: Precipitation moderate to very heavy. Maximum 1.33 in. northern mountains. Temperature maximums 1 to 5° below normal. Minimums 2 to 5° above normal.

Soil moisture 58% adequate, 42% surplus. Snow, rain delayed fieldwork. Calving 32% complete, lambing 24% complete, shearing 36% complete farm flocks, shearing range flocks underway south, expected to begin north in April. Feed supplies adequate to surplus. Livestock generally good to excellent. Major farm activities: Hauling manure, calving, lambing, shearing, planting spring grains, ditch maintenance, servicing equipment.

VIRGINIA: Modest rainfall, cool temperatures. Temperatures averaged 6° below normal. Range 12° to 68°. Rainfall averaged 0.25 to 0.50 in. most areas, over 1.00 in. southwest.

Days suitable for fieldwork 3.1. Topsoil moisture 80% adequate, 20% surplus. Fertilized pastures, hay, small grains. Spread lime, plowed fields, seeded oats, overseeded pastures, hay land. Potatoes 15% seeded. Flue-cured tobacco plantbed seeding over 90% complete. Burley tobacco plantbed seeding 40% complete. Pastures, alfalfa, tobacco, small grains good to excellent. Pruned fruit trees. Bud development slowed by cool weather. Livestock mostly good, Feed tight. Some feeder cattle, lamb sales.

WASHINGTON: Cool, cloudy statewide. Temperatures 6° above normal to 2° below; extremes 24°; 62°. Light precipitation, selected areas; ranged 0.09 to 2.46 in.

Rain showers throughout State kept soils too wet for field cultivation. Range, pasture conditions improving; 60% adequate, 40% short. Hay, roughage; 80% adequate, 20% surplus. Calving, lambing continued. Pruning nearly complete. Dormant sprays being applied. Winter wheat beginning to grow. Crops mostly good.

WEST VIRGINIA: Average temperature 41°, ranged from normal northwest to -3° central. Extremes 9° Greenbank; 73° Creston. Precipitation averaged 0.15 in.; well below normal.

Soil moisture 63% short, 37% adequate. Feed supplies mostly adequate.

WISCONSIN: Temperatures above normal, low 8°; high 68°. Precipitation none to 0.40 in., rain central, south on 15th.

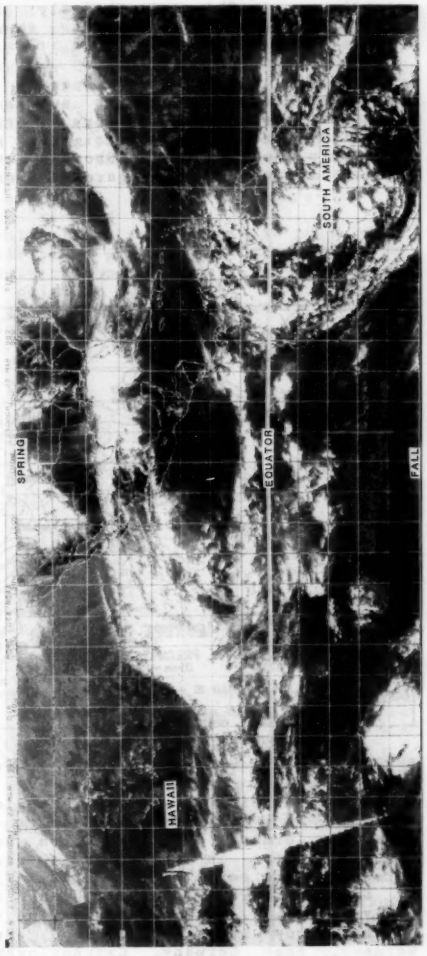
Fields greening, too soft for fieldwork. Farmers cleaned manure pits.

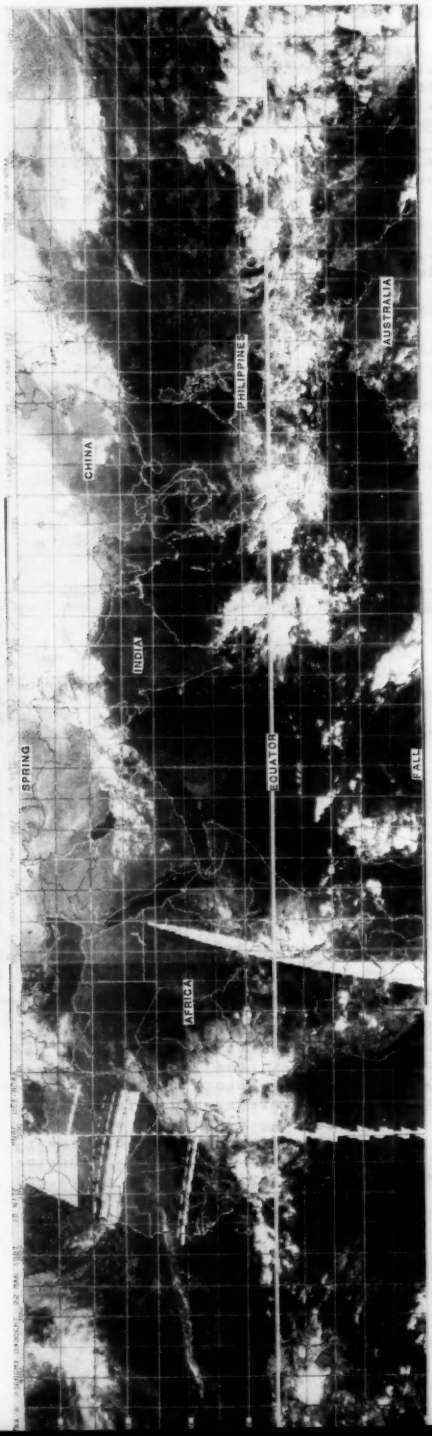
WYOMING: Temperatures, precipitation above normal.

Winter wheat fair to good. Livestock mostly good. Calving, lambing, shearing continued. Damp conditions caused light stress. Supplemental feeding continued as needed. Surplus hay for sale many areas.

Global Weather Satellite Image

MARCH 22, 1987





International Weather and Crop Summary

March 15 to 21, 1987

HIGHLIGHTS:

UNITED STATES ... Precipitation slows land preparation and seeding across most of the eastern half of the Nation. Wet, cold weather blankets the Nation's midsection from Montana to northern Texas, but causes very little damage to winter wheat and small grains.

WESTERN U.S.S.R. ... Unseasonable cold continues over the region. A moderate later than usual snow cover prevents early season fieldwork in the Ukraine and North Caucasus.

EUROPE ... Unseasonable cold keeps winter grains dormant later than usual in France, England, Italy's Po Valley, and eastern Yugoslavia.

SOUTH ASIA ... Heavy showers boost irrigation reserves for filling wheat in northern Pakistan. Mostly light rain covers India's grain areas.

SOUTH AFRICA ... Showers benefit late grain-filling corn in South Africa's primary grain areas.

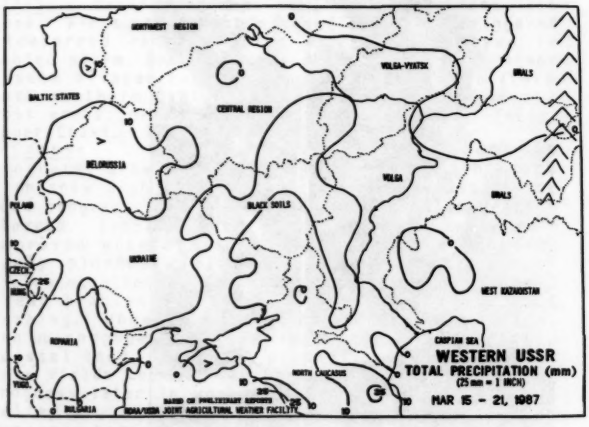
NORTHWESTERN AFRICA ... Persistent dryness in Morocco causes crop conditions to deteriorate. A drying trend continues over winter grains in Algeria and Tunisia.

SOUTHEAST ASIA ... Rainfall diminishes in Southeast Asia. Light rain covers the Philippines.

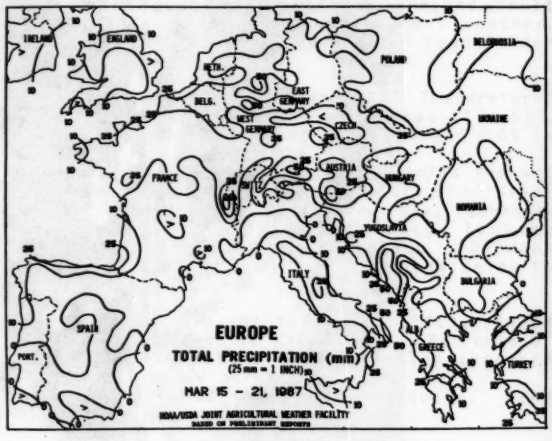
EASTERN ASIA ... Precipitation increases over most agricultural areas in China.

SOUTH AMERICA ... In Brazil, generally favorable harvest weather prevails in the south. Showers briefly interrupt harvesting in Argentina's summer crop areas.

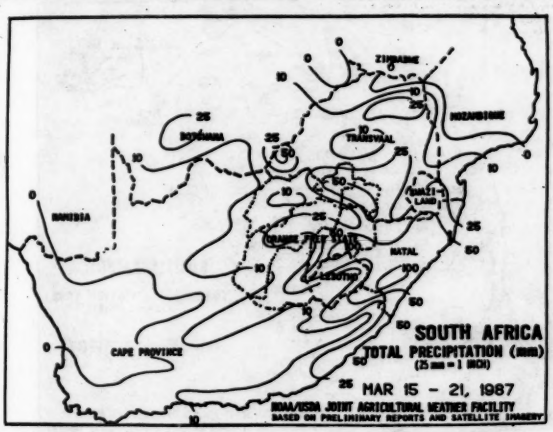
AUSTRALIA ... Rainfall improves moisture reserves for reproductive summer crops in eastern Australia, but dry, warm pockets persist over some unirrigated areas in southern Queensland. Showers move into Queensland's southern sugarcane areas.



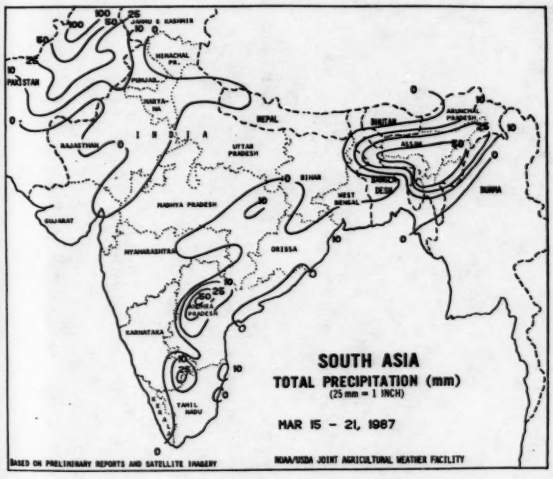
WESTERN U.S.S.R. ... Unseasonable cold weather continued over major winter wheat areas in the Ukraine, North Caucasus, and the lower Volga, keeping winter grains dormant. Weekly average temperatures in these areas ranged from 3 to 6 degrees C below normal. A moderate snow cover reached as far south as the Black Sea coast, preventing early season fieldwork. During March, snow cover usually retreats north and east. By month's end, crop areas in the Baltic States, Belorussia, the Ukraine, and North Caucasus are without a snow cover. Light, scattered precipitation (less than 10mm) covered much of the region, except for crop areas in Belorussia that received moderate snow. Winter grains remained dormant over the region. Winter grains usually break dormancy in the Ukraine and North Caucasus in early April.



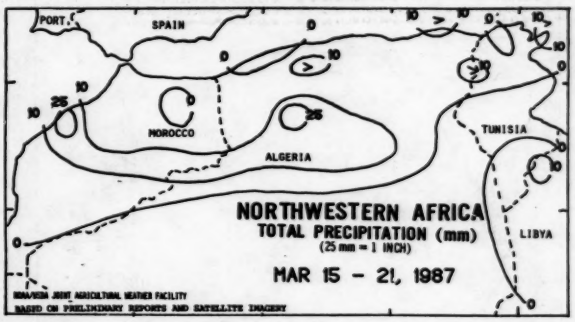
EUROPE ... Unseasonable cold weather continued, keeping winter grains dormant over much of the continent. Winter grains in England, France, Italy's Po Valley, and eastern Yugoslavia remained dormant at later than normal dates. Winter grains in these areas usually break dormancy from early to mid-March. Winter grains in Eastern Europe usually break dormancy in early April. Light precipitation (10 to 25mm) covered crop areas in England, France, West Germany, East Germany, Czechoslovakia, eastern Yugoslavia, central Italy, and Greece. Insufficient moisture in Spain continued a dry pattern which began in early March. Rain is needed for winter grains approaching the heading stage in the south.



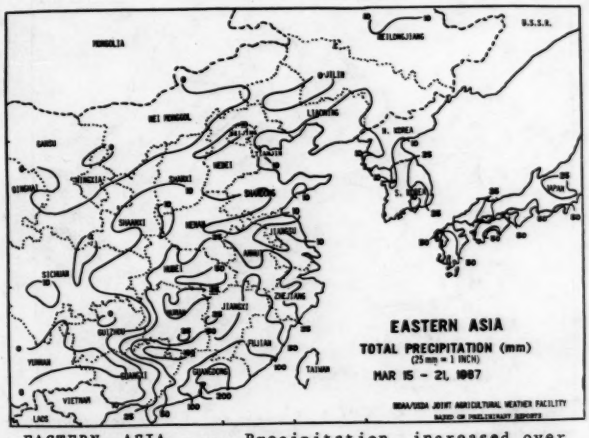
SOUTH AFRICA ... Beneficial showers (10 to 90mm) swept through the Maize Triangle, benefiting late grain-filling corn in primary growing areas of the Orange Free State and southern Transvaal. Rainfall averaged over 25mm in parts of the Orange Free State and Transvaal which had been trending dry, but crops were nearing maturity in most areas and may not have greatly benefited from the improved moisture. Scattered showers (10 to 66mm) in the central and northern Transvaal benefited grain-filling corn, but temperatures reached 35 degrees C in areas receiving only light rainfall (less than 10mm). Harvest activities are underway in parts of the Maize Triangle that planted early in response to favorable moisture supplies in October. Harvesting usually lasts from April to late July throughout South Africa.



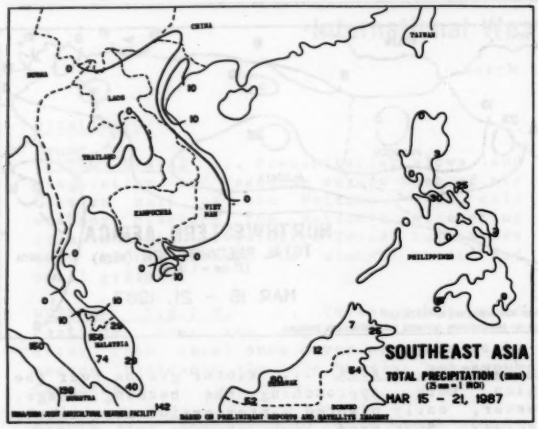
SOUTH ASIA ... Heavy showers (17 to more than 100mm) covered northern Pakistan's winter grain regions. The rainfall boosted irrigation reserves for reproductive wheat but may have caused lodging over a small area. Light rain (less than 5mm) increased irrigation reserves for northern India's winter grains, while dry weather in central India promoted harvesting. Mostly light rain (less than 10mm) maintained irrigation supplies for reproductive summer rice in southeast India.



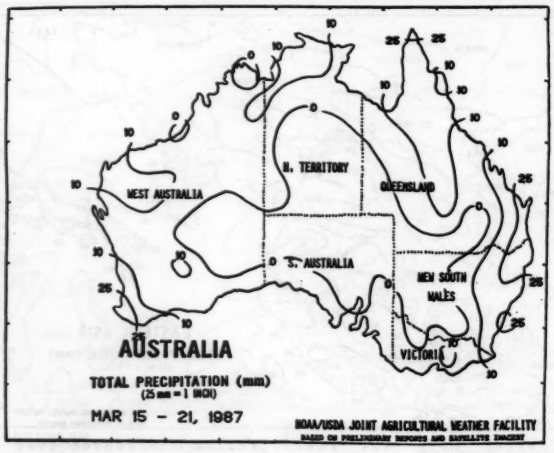
NORTHWESTERN AFRICA ... Winter grains over the region were approaching the heading stage. However, early planted winter grains were likely heading. Scattered, light showers fell over the principal crop areas. However, at most locations, rainfall amounts were insufficient to meet the increasing crop-moisture requirements. Morocco's dry weather pattern has lasted for the past several weeks, and crop conditions are likely deteriorating. Weekly temperatures were above normal in Morocco and below normal in Algeria and Tunisia. On March 16, scattered frost (minimum temperatures of -1 to -3 degrees C) in northeastern Algeria may have hurt early planted winter grains in the more weather sensitive heading stage.



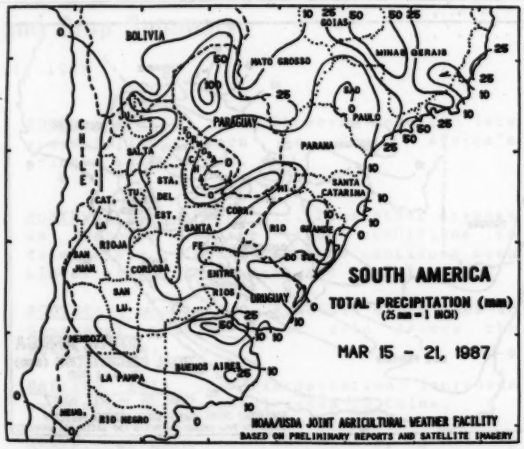
EASTERN ASIA ... Precipitation increased over all agricultural areas in China. Moderate to heavy rain covered early rice areas in Guangdong, southern Hunan, eastern Jiangxi, and Fujian. Rainfall in these areas ranged from 50 to 100mm, with isolated locations in central Guangdong receiving inundative rain (amounts in excess of 200mm). Although local flooding was possible in some areas, the heavy rains were welcomed because they increased irrigation supplies for rice planting. Further north, moderate rain (25 to 56mm) in Hunan, Hubei, and Anhui boosted moisture reserves for early rice planting. In the North China Plain, light precipitation (6 to 21mm) covered winter wheat in the early vegetative stage. However, some dry pockets still existed in northern Shandong, Hebei, and northern Shanxi.



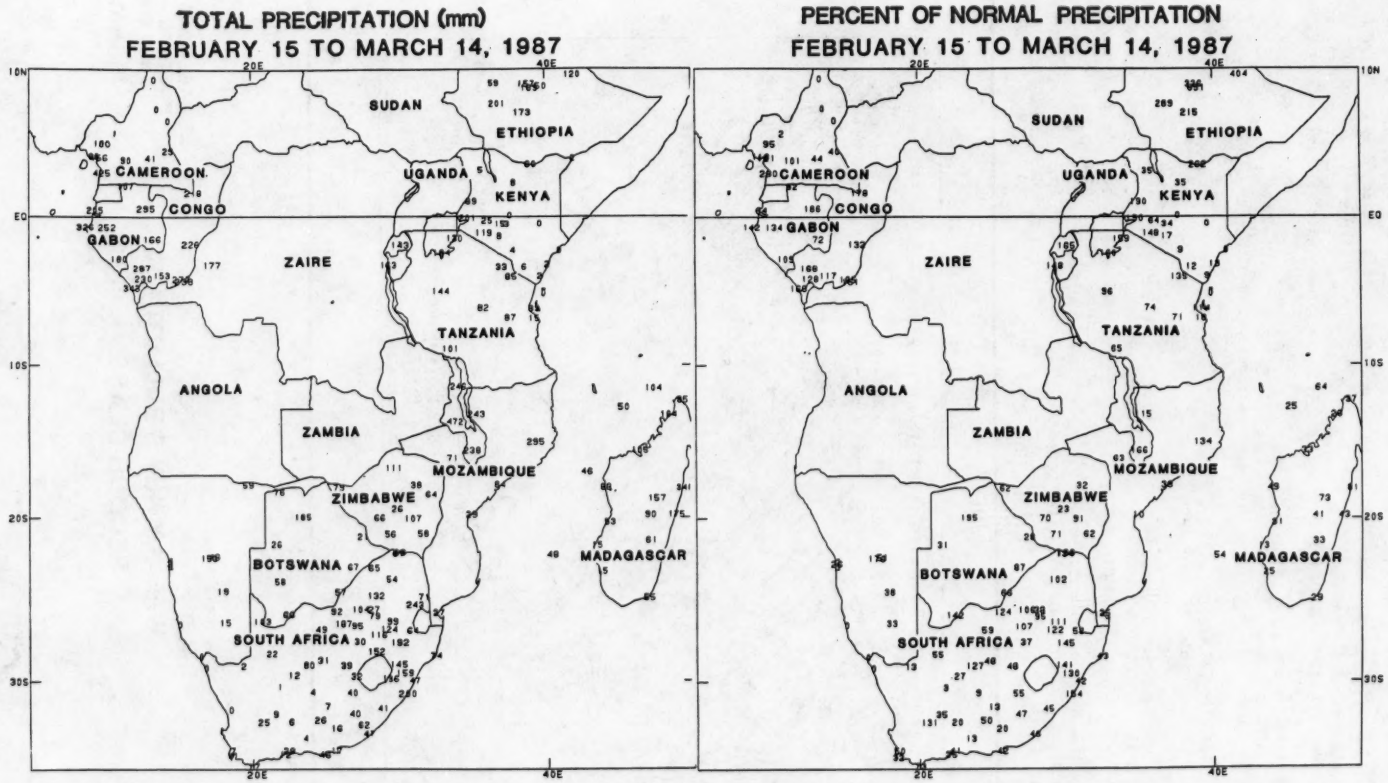
SOUTHEAST ASIA ... Rainfall diminished in Southeast Asia, averaging less than 10mm in eastern Thailand. Rainfall in recent weeks has improved soil moisture levels in the mostly unirrigated corn and rice regions of northeastern Thailand. However, the drought which has stricken southern and eastern orchards and rubber plantations is affecting some upland crop areas. Corn and upland rice planting in Thailand is usually underway by early April. Light rain (less than 10mm) covered the Philippines. Below-normal rainfall in the Philippines since December necessitates rainfall in preparation for April's corn and rice planting in unirrigated areas. Seasonable tropical showers (25 to more than 100mm) covered Malaysia and Indonesia.



AUSTRALIA ... Moderate showers (10 to 23mm) improved moisture reserves for filling grains and cotton in New South Wales and parts of southern Queensland. However, rainfall averaged less than 2mm in most summer crop areas in Queensland as maximum temperatures averaged 32 to 34 degrees C. Moisture is limited for crops in the late reproductive stage in some unirrigated areas. Moderate showers (10 to 37mm) improved conditions somewhat in sugarcane areas of southern Queensland, but minimal rain (less than 10mm) fell in northern areas. Despite increased irrigation since the normal onset of the rainy season in December, moisture is limited in most southern areas for sugarcane's normal development.



SOUTH AMERICA ... In Brazil, substantial showers were confined to summer crop areas of southern Mato Grosso do Sul, Goias, and southern Minas Gerais. Mostly dry weather favored corn and soybean harvesting in Parana and western Rio Grande do Sul. Cotton harvesting is also underway in Parana and Sao Paulo. Dry, warm weather during the past several weeks in western Parana may affect late filling of immature grains and oilseeds. However, a major portion of the summer crops has reached the maturing stage. In Argentina, showers and thunderstorms during mid-week slowed summer crop harvesting briefly in northern portions of Buenos Aires and La Pampa. Minimal rain caused little harvest delays in southern Cordoba and southern Santa Fe, while heavier showers in the northeast temporarily interrupted fieldwork. Drier weather returned by week's end. Temperatures generally averaged near to slightly above normal over the region.



In southern Africa, corn normally advances through the critical reproductive phase in February and early March. Hot, dry weather in southern Zambia, Zimbabwe, and central/southern Mozambique persisted through February and the first 2 weeks of March, stressing crops advancing through the critical reproductive phase. Moisture availability for filling corn in these areas is poor, and crops are in dire need of rain before reaching maturity. Rainfall and moisture conditions have been more favorable in the northern sections of Zambia, Zimbabwe, and Mozambique due to the presence of the intertropical convergence zone (ITCZ) in these areas, but the ITCZ has become weaker and more erratic recently, with increased rains in Ethiopia. In Tanzania, moisture conditions were favorable everywhere except the coast, which has been dry.

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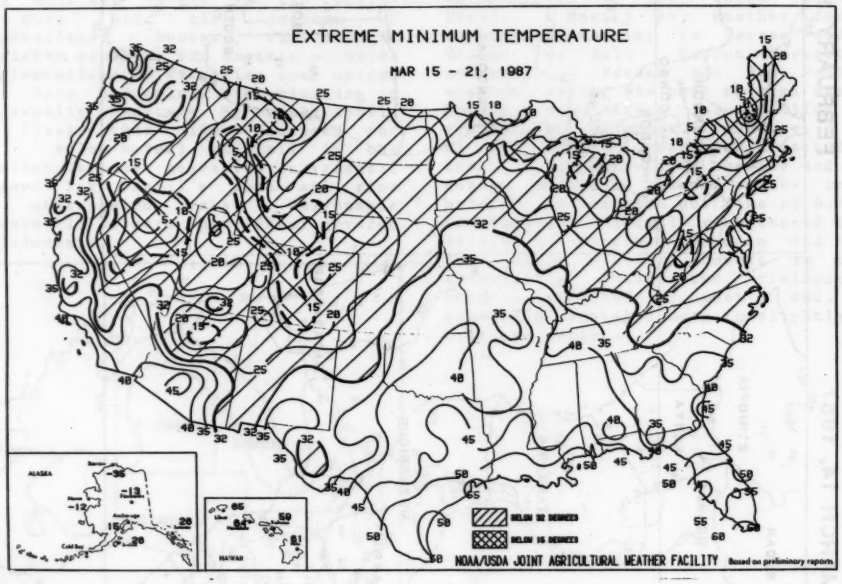

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